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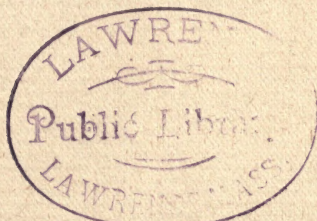
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THE

NORTH AMERICAN REVIEW.

EDITED BY ALLEN THORNDIKE RICE.

137
VOL. CXXXVII.

Tros Tyriusque mihi nullo discrimine agetur.

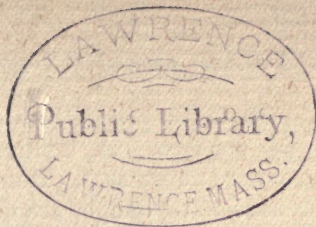


NEW YORK:
No. 30 LAFAYETTE PLACE.
1883.

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1883.

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NORTH AMERICAN REVIEW.

No. CCCXX.

JULY, 1883.

DYNAMITE AS A FACTOR IN CIVILIZATION.

ATTEMPTS to subvert existing institutions by violence have been sufficiently frequent in the past to afford some basis for judging as to their course and issue; and the use in our time of the new and mighty enginery of destruction which modern science has furnished is not new in its spirit, or aim, or probable results. The sources of the danger which now threatens are not new, and are not in the dynamite itself. It is not in the weapon, but in the hands which use it; and not in these, but in the hearts which direct them that the real peril is to be found. The choices of men are the root of the whole trouble; and its future bearings will only be seen in the motives hereafter most likely to prevail in human purposes.

It is quite clear at the outset—human nature remaining as it is—that political problems are not likely to be solved by force and fear alone. This can be said without any loss of the potency which these agencies undoubtedly exercise. There is a sphere of human life in which force reigns as manifestly as in any department of nature. A man feels pain and fears it—a feeling and a fear not lessened, but rather increased, by increasing intelligence. The superior intelligence which gives a man more skill to shun danger makes him also more keenly sensitive to

its presence. A man takes precautions against perils which give an animal no concern. A civilized man apprehends dangers which the savage never sees. Hence the application of force and the apprehension of danger are not likely to lose their influence on human conduct in the coming civilization.

When, however, force is employed there is resistance. Force meets force. Its use by a government to put down opposition, or by an opposition to overthrow a government, meets a counter-acting force in an issue which can only be decided by the greater. But when the greater force has triumphed, it is not thereby dominant. "Force and right," says Joubert, "rule all things in the world; force before right arrives"; but right has already arrived when men have come. It is ever present, and with an authority which does not come from fear. It springs from a source altogether different from hope, or fear, or pleasure, or pain. Its original place, from which no force can drive it, is a throne. It directs human conduct by authoritative precept and not by a craving—a distinction as broad as exists between the heavens and the earth. Whatever individual men may say or do, however often and darkly wrong may take the place of right in the conduct of men, mankind is wiser than any man; and in all human speech, in institutions and laws, in the procedure of courts and of governments, and even in the instincts of what Homer* calls the homelessness and lawlessness of savage life, there is never wanting the witness of this supreme presence, which rules in all states, and claims ascendancy in all souls, and which, in some way, does contrive to get the mastery over force and fear.

We may, therefore, safely anticipate that what has been in this respect will continue to be. The future does not threaten the race with a continued reign of violence and terror. That principle of authority in every soul, which is, says Richard Hooker,† "laid up in the bosom of God," which commands, says Cicero,‡ "what ought to be done," which declares, says Demosthenes,|| "what is just and honorable," and whose utterances, says Sophocles,§ "are not of to-day, nor of yesterday, and no man can tell when they came," is able to secure the supremacy it claims. It may make force and fear its ministers,

* *Iliad* IX., 63.

† "*Ecclesiastical Polity*," I., iii., 1.

‡ "*De Legibus*," i., 6.

|| "*Orat.* 1, cont., *Aristog.*" § "*Antigone*," 456.

but will never take them as its masters. These, therefore, can exercise no permanent constraint or terror as instruments of evil. It is only when the right rules them that they are able to rule, in which case their rule need not be dreaded. When force and fear are used unrighteously, be it by an unrighteous government or an unrighteous opposition to government, their agents are sure to incur the doom of their victims.

Again, we may confidently anticipate that, whatever governments may be overthrown in the future, government itself will not cease. Neither universal anarchy, nor universal license for the individual is a future probability. Individuals may destroy themselves, but society will not commit suicide. Men are connected together in the organic interdependence of the state, not because they need each other's protection, or desire the pleasure of one another's presence, or have chosen the obligation of mutual agreement and fellowship, but because they are men only as they are members of society; they are born into the state as they are born into their manhood, and they can no more dis sever themselves from those obligations to one another of which civil government is only the embodiment and the expression, than they can break away from human nature itself.

Advancing civilization neither weakens the power nor diminishes the necessity of civil government. It rather increases these. The civilized man has more government than the savage. Indeed, it is the lawlessness of the savage which makes him a savage, and civilization is truly, as the word implies literally, the reign of the state. Government is needed not merely because men are unwilling to be governed. The need is quite as much in the ignorance of men. In the most highly enlightened community, human actions become so complex, human relations are interwoven in such unnumbered combinations, that confusion becomes inextricable without government. Let one note the infinite complications which arise, and the adjustments which become necessary from the introduction of any one of the great inventions or institutions which our modern life employs,—*e. g.*, the steam-engine, telegraphy, banking,—if he would see the constant need of governmental guidance to secure justice and preserve order and peace. The attempted application of anarchical theories, therefore, to the civilized world will find itself hindered quite as much by a popular instinct as by governmental resistance.

Still further, it is quite clear that the well-being of society is not to be gained through an adjustment of conflicting interests. Here is the frequent mistake of both the statesman and the political economist, who look upon human society as an aggregation of individuals each of whom is to be guarded in his rights against the aggression of another. Self-interest is supposed to be the mainspring of human action, and good order is thought to be secured when men can be made to see that it is for their interest to live in peace with one another. Political science deems itself to have accomplished its task when it has shown how all social disturbances and disorders spring from ignorance of the real interests of men, and how perfect harmony can be maintained by exact adjustments.

Judged by the strictly scientific method, this is very well. It is logical. But the difficulty, when we come to apply it, is that men are not logical. In the practical conduct of life they are governed by their sentiments, and not by their understandings. And when we look closely into the sentiment from which springs every social disturbance, we find it, at bottom, to be this very self-interest, which we now seek to elevate into a source of peace. It is only because men seek their own and not another's good that there is any social ill; and while it may be quite true that their seeking has been in mistaken ways, and that they in reality have only wronged themselves in their methods of gaining their supposed rights, not only cannot they be led to avoid their mistakes merely by having these revealed to them, but the self-seeking sentiment, which is the sole source of evil, cannot, by any increasing knowledge,—by any keener sense or shrewder judgment,—become a fountain of good. Honesty is, doubtless, the best policy, but no policy ever yet made an honest man. In like manner men, doubtless, in the long run, maintain their own interests best by carefully maintaining also the interests of others, but it is a very narrow reading of history, and a very superficial acquaintance with human nature, which has not seen that from such a motive thus applied no desirable results ever come. "Skin for skin, yea, all that a man hath will he give for his life," said Satan; but men are destroying their lives all the while, and this none the less where the means of saving them are the largest and the most clearly known. "Whosoever would save his life shall lose it," says the Lord; "but whosoever shall lose his life for my sake, the same shall save it." For my sake!

There is great emphasis here. To lose one's life for one's own sake is a loss without any compensation or refinding, but to lose it for another's sake, for the Lord's sake, brings it back again new born, recreated, self-sacrifice taking the place of self-seeking, and love becoming the true life. An acquaintance with mankind which has not passed beyond the Satanic point of view, does not understand this, but he who has seen what Christ has done in human souls, and has profoundly studied the changes which his life has actually wrought in the organization of society, while he may well despair of light from any other source, will find the social problem perfectly solved in the Christian principle. "Love worketh no ill to his neighbor: therefore love is the fulfilling of the law." If every man were truly Christ's disciple, all bearing one another's burdens, and so fulfilling the law of Christ, society would be consciously knit together in a true interdependence,—the interdependence of an organism, wherein each part is at the same time the means and the end of all the rest,—and crime, and vice, and wrong of every sort would cease. The Son of God is the true Son of Man, and when the kingdoms of this world shall truly have become his kingdom, when he shall have become enthroned in all institutions, and laws, and movements of men, man must have then gained his true perfection, violence then can no more be heard, and wasting and destruction must disappear.

Now, the disturbances of our time constrain us, by their very dreadfulness, to look for the foundation stones of human progress. We can move in entire fearlessness when the ground does not shake; but when it is quivering beneath, and gaping all about us, we must note well where our steppings are. The first effect upon our civilization to be expected from the dire procedures which have lately excited the world is the startled vision which must behold its danger. It sees because it cannot turn away its eyes.

Our age is often called a superficial age, an age of frivolity and shams, but I confess it seems to me far otherwise. There is frivolity enough indeed, and shams enough now apparent; but it would take me long to find an age with a keener eye, or with more depth of feeling, or a greater earnestness of action than the age which has fought victoriously the battle with the slave-power in America, which has not only witnessed but secured the emancipation of the serfs in Russia, which has achieved the

triumphs of German and Italian unity, which has despoiled the Papacy of its temporal power, which has secured the British Empire in India, which has introduced so prominently the principle of arbitration in the settlement of national disputes, which has wrought such surpassing deeds of missionary enlightenment in India, in Madagascar, and the South Seas, and whose wonders of science and industry and invention have been paralleled in no age. The nineteenth century is not purblind. It has good eyes. It has a good heart also, and will not suffer itself to be hoodwinked. It is, therefore, likely to see its true defense as well as its peril. It knows better than to seek to quell its fears by force alone, and will surely learn—is beginning already to learn*—that its labor-saving inventions are not of themselves going to lighten the burden of labor; that its social science can give neither the impulse nor the ground for social progress; that its increase of wealth, its industry, its intelligence, instead of being instruments of defense, may all be turned into deadly weapons of destruction; that self-interest does not secure self-preservation; and that in the principle of self-forgetfulness, wherein each one pleases not himself but his neighbor, even as Christ pleased not himself, is the only true means of social safety and strength and growth.

It would be a very narrow intellect which should think lightly of those triumphs of invention or achievements of science which form so prominent a characteristic of the present age; but it would be a very short-sighted vision which should not see the inaptitude of these to secure social perfection. The penetrating thought will reach to the full requirements of the case; and the nineteenth century, not lacking in penetration, will see that it can only be saved, and will only be satisfied, by becoming more Christlike.

These positions do not rest upon the optimistic persuasion that there is in human nature an inherent tendency to a progressive improvement, for such a persuasion cannot be justified by facts. When we look at history comprehensively, no such tendency appears. Viewed simply in respect of extent of territory or numbers embraced, deterioration shows more prominently in the actual history of the world than progress. Arts and litera-

* "It is questionable," says John Stuart Mill, "if all the mechanical inventions yet made have lightened the day's toil of any human being."—*"Polit. Econ."* B. 10; ch. 6.

tures and civilizations and religions have decayed far oftener than they have manifested an increasing growth.

Taking the facts as they are, without prejudging them by any theory, human nature shows a singular aptitude to slip away from its vantage-grounds, as though it was far more powerfully controlled by a proclivity to a lower state, than by an impulse to a higher one. This aptitude is just as evident to-day as ever. No one can look carefully at our present civilization without noting signs of evil which in other civilizations have been portents of ruin. But, in the words of the sagacious Niebuhr, "as the consideration of nature shows an inherent intelligence which may also be conceived as coherent with nature, so does history, on a hundred occasions, show an intelligence which is distinct from nature, which conducts and determines those things which may seem to us accidental; and it is not true that the study of history weakens the belief in a Divine Providence. History is, of all kinds of knowledge, the one which tends most decidedly to this belief." There is thus another factor than human agency, entering into the product of human history. The historical evidence alone, closely scrutinized, shows what can only be denominated a divine superintendence. The historical movement is a movement with a divine purpose, of whose meaning we get glimpses, with increasing clearness from increasing study of the actual procedure. The incarnation of the Son of God is the focal point to which all lines preceding it converge, and from which radiate the most potent influences in the subsequent history of the world. These influences are still mighty. They are an exhaustless source of power. They show themselves guided by unerring wisdom. We need not therefore anticipate from them either a mistake or a failure. They preach to us courage, even while human endeavors, left to themselves, are as likely as ever to end in disaster.

JULIUS H. SEELYE.

THE LAST DAYS OF THE REBELLION.

PUBLIC attention having of late been occasionally called to some of the events that occurred in the closing scenes of the Virginia campaign, terminating at Appomattox Court-house, April 9, 1865, I feel it my duty to give to history the following facts:

When, April 4, 1865, being at the head of the cavalry, I threw across the line of General Lee's march, at Jettersville, on the Richmond and Danville Railroad, my personal escort, the First United States Cavalry, numbering about 200 men, a tall, lank man was seen coming down the road from the direction of Amelia Court-house, riding a small mule and heading toward Burkesville Junction, to which point General Crook had, early that morning, been ordered with his division of cavalry, to break the railroad and telegraph lines. The man and the mule were brought to a halt, and the mule and himself closely examined, under strong remonstrances at the indignity done to a Southern gentleman. Remonstrance, however, was without avail, and in his boots two telegrams were found from the Commissary-General of Lee's army, saying: "The army is at Amelia Court-house, short of provisions; send 300,000 rations quickly to Burkesville Junction." One of these dispatches was for the Confederate Supply Department at Danville, the other for that at Lynchburg. It was at once presumed that, after the dispatches were written, the telegraph line had been broken by General Crook north of Burkesville, and they were on their way to some station beyond the break, to be telegraphed. They revealed where Lee was, and from them some estimate could also be formed of the number of his troops. Orders were at once given to General Crook to come up the road from Burkesville to Jettersville, and to General Merritt, who, with the other two divisions of cavalry, had followed the road from Petersburg,

on the south side of and near the Appomattox River, to close in without delay on Jettersville, while the Fifth Army Corps, under the lamented Griffin, which was about ten or fifteen miles behind, was marched at a quick pace to the same point, and the road in front of Lee's army blocked until the arrival of the balance of the army of the Potomac the afternoon of the next day. My command was pinched for provisions, and these dispatches indicated an opportunity to obtain a supply; so, calling for Lieutenant-Colonel Young, commanding my scouts, four men, in the most approved gray, were selected—good, brave, smart fellows, knowing every cavalry regiment in the Confederate army, and as good “Johnnies” as were in that army, so far as bearing and language were concerned. They were directed to go to Burkesville Junction and there separate. Two were to go down the Lynchburg branch of the railroad until a Confederate telegraph station was found, from which they were to transmit by wire the above-mentioned rebel dispatches, represent the suffering condition of Lee's army, watch for the trains, and hurry the provisions on to Burkesville, or in that direction. The other two were to go on the Danville branch, and had similar instructions. The mission was accomplished by those who went out on the Lynchburg branch, but I am not certain about the success of the other party; at all events, no rations came from Danville that I know of.

I arrived at Jettersville with the advance of my command—the First United States Cavalry—on the afternoon of the 4th of April. I knew the condition and position of the rebel army from the dispatches referred to, and also from the following letter (erroneously dated April 5th), taken from a colored man who was captured later in the day:

“AMELIA C. H., April 5, 1865.

“DEAR MAMMA: Our army is ruined, I fear. We are all safe as yet. Shyron left us sick. John Taylor is well; saw him yesterday. We are in line of battle this morning. General Robert Lee is in the field near us. My trust is still in the justice of our cause and that of God. General Hill is killed. I saw Murray a few minutes since. Bernard Terry he said was taken prisoner, but may get out. I send this by a negro I see passing up the railroad to Michlenburg. Love to all.

“Your devoted son,

“WM. B. TAYLOR, Colonel.”

I accordingly sent out my escort to demonstrate and make as much ado as they could, by continuous firing in front of the enemy

at or near Amelia Court-house, pending the arrival of the Fifth Corps. That corps came up in the course of the afternoon, and was put into position at right angles with the Richmond and Danville road with its left resting on a pond or swamp on the left of the road. Toward evening General Crook arrived with his division of cavalry, and later General Merritt, with his two divisions; and all took their designated places. The Fifth Corps, after its arrival, had thrown up earth-works and made its position strong enough to hold out against any force for the period which would intervene before the arrival of the main body of the army of the Potomac, now rapidly coming up on the lines over which I had traveled.

On the afternoon and night of the 4th, no attack was made by the enemy upon the small force in his front,—the Fifth Corps and three divisions of cavalry,—and by the morning of the 5th, I began to believe that he would leave the main road if he could, and pass around my left flank to Sailor's Creek and Farmville. To watch this suspected movement, early on the morning of the 5th, I sent Davies's brigade of Crook's division of cavalry, to make a reconnoissance in that direction. The result was an encounter by Davies with a large train of wagons, under escort, moving in the direction anticipated. The train was attacked by him, and about 200 wagons were burned, and five pieces of artillery and a large number of prisoners captured. In the afternoon of April 5th, the main body of the army of the Potomac came up. General Meade was unwell and requested me to put the troops in position, which I did, in line of battle, facing the enemy at Amelia Court-house. I thought it best to attack at once, but this was not done. I then began to be afraid the enemy would, in the night, by a march to the right from Amelia Court-house, attempt to pass our left flank and again put us in the rear of his retreating columns. Under this impression I sent to General Grant the following dispatch:

“CAVALRY HEAD-QUARTERS,

JETTERSVILLE, April 5, 1865.—3 P. M.

“Lieutenant-General U. S. GRANT, Commanding Armies of the United States.

“General: I send you the enclosed letter, which will give you an idea of the condition of the enemy and their whereabouts. I sent General Davies's brigade this morning around on my left flank. He captured at Fames's Cross-roads five pieces of artillery, about 200 wagons, and eight or nine battle-flags, and a number of prisoners. The Second Army Corps is now

coming up. I wish you were here yourself. I feel confident of capturing the army of Northern Virginia, if we exert ourselves. I see no escape for Lee. I will put all my cavalry out on our left flank, except Mackenzie, who is now on the right.

“(Signed)

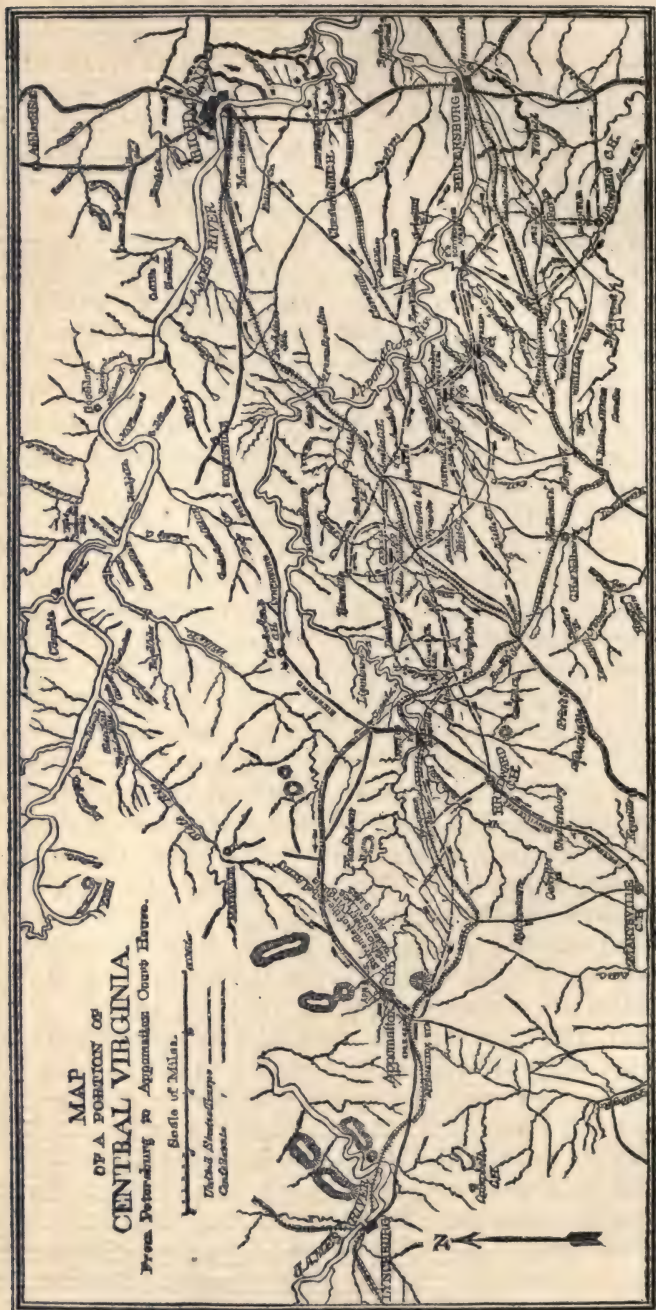
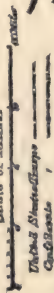
P. H. SHERIDAN, Major-General.”

On receipt of this he immediately started for my head-quarters at Jettersville, arriving there about 11 o'clock of the night of April 5th. Next morning, April 6th, the infantry of the army advanced on Amelia Court-house. It was found before reaching it that the enemy had turned our left flank and taken another road to Sailor's Creek and Farmville. The cavalry did not advance with the infantry on Amelia Court-house, but moved to the left and rear, at daylight on the morning of the 6th, and struck the moving columns of the enemy's infantry and artillery, with which a series of contests ensued that resulted in the battle of Sailor's Creek, where Lieutenant-General Ewell lost his command of about ten thousand men, and was himself taken prisoner, together with ten other general officers.

We now come to the morning of the 7th. I thought that Lee would not abandon the direct road to Danville through Prince Edward's Court-house, and early on the morning of the 7th, directed General Crook to follow up his rear, while with Merritt (Custer's and Devin's divisions), I swung off to the left, and moved quickly to strike the Danville road six or eight miles south of Prince Edward's Court-house, and thus again head or cut off all or some of the retreating Confederate army. On reaching that road, it was found that General Lee's army had not passed, and my command was instantly turned north for Prince Edward's Court-house. A detachment ordered to move with the greatest celerity, via Prince Edward's Court-house, reported that Lee had crossed the Appomattox at and near Farmville, and that Crook had followed him. On looking at the map it will be seen that General Lee would be obliged to pass through Appomattox Court-house and Appomattox station on the railroad, to reach Lynchburg by the road he had taken north of the Appomattox River, and that that was the longest road to get there. He had given the shortest one—the one south of the river—to the cavalry. General Crook was at once sent for, and the three divisions, numbering perhaps at that time 7000 men, concentrated on the night of the 7th of April at and near Prospect station on the Lynchburg and Richmond Rail-

MAP
OF A PORTION OF
CENTRAL VIRGINIA
From Petersburg to Appomattox County House.

Scale of Miles.



road, and Appomattox station became the objective point of the cavalry for the operations of the next day, the 8th.

Meantime my scouts had not been idle, but had followed down the railroad, looking out for the trains with the 300,000 rations which they had telegraphed for on the night of the 4th. Just before reaching Appomattox station, they found five trains of cars feeling their way along in the direction of Burkesville Junction, not knowing exactly where Lee was. They induced the person in charge to come farther on by their description of the pitiable condition of the Confederate troops. Our start on the morning of the 8th was before the sun was up, and having proceeded but a few miles, Major White, of the scouts, reached me with the news that the trains were east of Appomattox station, that he had succeeded in bringing them on some distance, but was afraid that they would again be run back to the station. Intelligence of this fact was immediately communicated to Crook, Merritt, and Custer, and the latter, who had the advance, was urged not to let the trains escape, and I pushed on and joined him. Before reaching the station, Custer detailed two regiments to make a detour, strike the railroad beyond the station, tear up the track and secure the trains. This was accomplished, but on the arrival of the main body of our advance at the station, it was found that the advance-guard of Lee's army was just coming on the ground. A sanguinary engagement at once ensued. The enemy was driven off, forty pieces of artillery captured, and four hundred baggage wagons burned. The railroad trains had been secured in the first onset, and were taken possession of by locomotive engineers, soldiers in the command, whose delight at again getting at their former employment was so great that they produced the wildest confusion by running the trains to and fro on the track, and making such an unearthly screeching with the whistles, that I was at one time on the point of ordering the trains burnt; but we finally got them off, and ran them to our rear ten or fifteen miles, to Ord and Gibbon, who with the infantry were following the cavalry. The cavalry continued the fighting nearly all that night, driving the enemy back to the vicinity of Appomattox Court-house, a distance of about four miles, thus giving him no repose, and covering the weakness of the attacking force.

I remember well the little frame-house just south of the station where the head-quarters of the cavalry rested, or rather,

remained, for there was no rest the night of the 8th. Dispatches were going back to our honored chief, General Grant, and Ord was requested to push on the wearied infantry. To-morrow was to end our troubles in all reasonable probability, but it was thought necessary that the infantry should arrive, in order to doubly insure the result. Merritt, Crook, and Custer were, at times, there. Happiness was in every heart. Our long and weary labors were about to close; our dangers soon to end. There was no sleep; there had been but little for the previous eight or nine days. Before sunrise, General Ord came in reporting the near approach of his command. After a hasty consultation about positions to be taken up by the incoming troops, we were in the saddle and off for the front, in the vicinity of Appomattox Court-house. As we were approaching the village, a heavy line of Confederate infantry was seen advancing, and rapid firing commenced. Riding to a slight elevation, where I could get a view of the advancing enemy, I immediately sent directions to General Merritt for Custer's and Devin's divisions to slowly fall back, and as they did so, to withdraw to our right flank, thus unmasking Ord's and Gibbons's infantry. Crook and Mackenzie, on the extreme left, were ordered to hold fast. I then hastily galloped back to give General Ord the benefit of my information. No sooner had the enemy's line of battle reached the elevation from which my reconnoissance had been made, and from whence could be distinctly seen Ord's troops in the distance, than he called a sudden halt, and a retrograde movement began to a ridge about one mile to his rear. Shortly afterward I returned from General Ord to the front, making for General Merritt's battle-flag on the right flank of the line. On reaching it, the order to advance was given, and every guidon was bent to the front, and as we swept by toward the left of the enemy's line of battle, he opened a heavy fire from artillery. No heed was paid to the deadly missiles, and, with the wildest yells, we soon reached a point some distance to his right and nearly opposite Appomattox Court-house. Beyond us, in a low valley, lay Lee and the remnant of his army. There did not appear to be much organization, except in the advanced troops under General Gordon, whom we had been fighting, and a rear-guard under General Longstreet, still further up the valley. Formations were immediately commenced, to make a bold and sweeping charge down the grassy slope, when an aide-de-camp from Cus-

ter, filled with excitement, hat in hand, dashed up to me with the message from his chief: "Lee has surrendered! Do not charge; the white flag is up!" Orders were given to complete the formation, but not to charge.

Looking to the left, to Appomattox Court-house, a large group was seen near by the lines of Confederate troops that had fallen back to that point. General Custer had not come back, and, supposing that he was with the group at the Court-house, I moved on a gallop down the narrow ridge, followed by my staff. The Court-house was, perhaps, three-fourths of a mile distant. We had not gone far before a heavy fire was opened on us from a skirt of timber to our right, and distant not much over three hundred yards. I halted for a moment, and taking off my hat, called out that the flag was being violated, but could not stop the firing, which now caused us all to take shelter in a ravine running parallel to the ridge we were on, and down which we then traveled. As we approached the Court-house, a gentle ascent had to be made. I was in advance, followed by a sergeant carrying my battle-flag. Within one hundred to one hundred and fifty yards from the Court-house and Confederate lines, some of the men in their ranks brought down their guns to an aim on us, and great effort was made by their officers to keep them from firing. I halted, and hearing some noise behind, turned in the saddle, and saw a Confederate soldier attempting to take my battle-flag from the color-bearer. This the sergeant had no idea of submitting to, and had drawn his saber to cut the man down. A word from me caused him to return his saber, and take the flag back to the staff-officers, who were some little distance behind. I remained stationary a moment after these events, then calling a staff-officer, directed him to go over to the group of Confederate officers, and demand what such conduct meant. Kind apologies were made, and we advanced. The superior officers met were General J. B. Gordon, and General Cadmus M. Wilcox, the latter an old army officer. As soon as the first greeting was over, a furious firing commenced in front of our own cavalry from whom we had only a few minutes before separated. General Gordon seemed to be somewhat disconcerted by it. I remarked to him, "General Gordon, your men fired on me as I was coming over here, and undoubtedly they have done the same to Merritt's and Custer's commands. We might just as

well let them fight it out." To this proposition General Gordon did not accede. I then asked, "Why not send a staff-officer and have your people cease firing? They are violating the flag!" He said, "I have no staff-officer to send." I replied, "I will let you have one of mine"; and calling for Lieutenant Vanderbilt Allen, he was directed to report to General Gordon and carry his orders. The orders were to go to General Geary, who was in command of a small brigade of South Carolina cavalry, and ask him to discontinue the firing. Lieutenant Allen dashed off with the message, but, on delivering it to General Geary, was taken prisoner, with the remark from that officer, that he did not care for white flags; that South Carolinians never surrendered.

It was about this time that Merritt, getting impatient at the supposed treacherous firing, ordered a charge of a portion of his command. While Generals Gordon and Wilcox were engaged in conversation with me, a cloud of dust, a wild hurrah, a flashing of sabers, indicated a charge, and the ejaculations of my staff-officers were heard, "Look! Merritt has ordered a charge!" The flight of Geary's brigade followed; Lieutenant Allen was thus released. The last gun had been fired, and the last charge made in the Virginia campaign.

While the scenes thus related were taking place, the conversation I now speak of was occurring between General Gordon and myself. After the first salutation, General Gordon remarked: "General Lee asks for a suspension of hostilities pending the negotiations which he has been having for the last day and night with General Grant." I rejoined: "I have been constantly informed of the progress of the negotiations, and think it singular that while such negotiations are going on, General Lee should have continued his march and attempted to break through my lines this morning with the view of escaping. I can entertain no terms except the condition that General Lee will surrender to General Grant on his arrival here. I have sent for him. If these terms are not accepted, we will renew hostilities." General Gordon replied: "General Lee's army is exhausted. There is no doubt of his surrender to General Grant on his arrival."

General Wilcox, whom I knew quite well, he having been captain of the company to which I was attached as a cadet at the military academy, then stepped to his horse, and taking hold

of the saddle-bags, said, in a jocular way: "Here, Sheridan, take these saddle-bags; they have one soiled shirt and a pair of drawers. You have burned everything else I had in the world, and I think you are entitled to these also." He was alluding, of course, to the destruction of the baggage trains which had been going on for some days.

When the terms above referred to were settled, each army agreed to remain *in statu quo* until the arrival of General Grant, whom Colonel Newhall, my adjutant-general, had gone for. Generals Gordon and Wilcox then returned to see General Lee, and promised to come back in about thirty minutes, and during that time General Ord joined me at the court-house. At the end of thirty or forty minutes, General Gordon returned in company with General Longstreet. The latter, who commanded Lee's rear guard back on the Farmville road, seemed somewhat alarmed lest General Meade, who was following up from Farmville, might attack, not knowing the condition of affairs at the front. To prevent this, I proposed to send my chief of staff, General J. W. Forsyth, accompanied by a Confederate officer, back through the Confederate army and inform General Meade of the existing state of affairs. He at once started, accompanied by Colonel Fairfax, of General Longstreet's staff, met the advance of the Army of the Potomac, and communicated the conditions.

In the meantime, General Lee came over to McLean's house in the village of Appomattox Court-house. I am not certain whether General Babcock, of General Grant's staff, who had arrived in advance of the General, had gone over to see him or not. We had waited some hours, and, I think, about twelve or one o'clock General Grant arrived. General Ord, myself, and many officers were in the main road leading through the town, at a point where Lee's army was visible. General Grant rode up, and greeted me with, "Sheridan, how are you?" I replied, "I am very well, thank you." He then said, "Where is Lee?" I replied, "There is his army down in that valley; he is over in that house (pointing out McLean's), waiting to surrender to you." General Grant, still without dismounting, said, "Come, let us go over." He then made the same request to General Ord, and we all went to McLean's house. Those who entered with General Grant were, as nearly as I can recollect, Ord, Rawlins, Seth Williams, Ingalls, Babcock, Parker, and myself; the staff offi-

cers, or those who accompanied, remaining outside on the porch steps and in the yard. On entering the parlor, we found General Lee standing in company with Colonel Marshal, his aide-de-camp. The first greeting was to General Seth Williams, who had been Lee's adjutant when he was superintendent of the Military Academy. General Lee was then presented to General Grant, and all present were introduced. General Lee was dressed in a new gray uniform, evidently put on for the occasion, and wore a handsome sword. He had on his face the expression of relief from a heavy burden. General Grant's uniform was soiled with mud and service, and he wore no sword. After a few words had been spoken by those who knew General Lee, all the officers retired, except, perhaps, one staff officer of General Grant's, and the one who was with General Lee. We had not been absent from the room longer than about five minutes, when General Babcock came to the door and said, "The surrender has taken place—you can come in again."

When we reëntered, General Grant was writing on a little wooden, elliptical-shaped table (purchased by me from Mr. McLean and presented to Mrs. G. A. Custer) the conditions of the surrender. General Lee was sitting, his hands resting on the hilt of his sword, to the left of General Grant, with his back to a small marble-topped table, on which many books were piled. While General Grant was writing, friendly conversation was engaged in by General Lee and his aid with the officers present, and he took from his breast-pocket two dispatches, which had been sent to him by me during the forenoon, notifying him that some of his cavalry, in front of Crook, were violating the agreement entered into by withdrawing. I had not had time to make copies when they were sent and had made a request to have them returned. He handed them to me with the remark, "I am sorry. It is possible my cavalry at that point of the line did not fully understand the agreement."

About one hour was occupied in drawing up and signing the terms, when General Lee retired from the house with a cordial shake of the hand with General Grant, mounted his chunky, gray horse, and lifting his hat, passed through the gate, and rode over the crest of the hill to his army. On his arrival there, we heard wild cheering, which seemed to be taken up progressively by his troops, either for him, or because of satisfaction with his last official act as a soldier.

P. H. SHERIDAN.

THE INCREASE OF PUBLIC EXPENDITURES.

THE Constitution of the United States invests Congress alone with power to appropriate money from the National treasury to the public use, but in the practical working of our system of Government, the responsibility for public expenditure is divided between Congress and the Executive department. "No money shall be drawn from the Treasury but in consequence of appropriations made by law," and the President "shall take care that the laws be faithfully executed." Under these two provisions of the Constitution and under this measure of responsibility, in general terms, are placed the control and disposition of the moneys which from year to year are gathered into the Treasury of the United States. There is, however, another provision—undoubtedly arising out of the jealousy with which the founders of the Republic regarded military power—which, while investing Congress with authority "to raise and support armies," ordains that "no appropriation of money to that use shall be for a longer term than two years." There is unquestionably a further and most important limitation on this power of appropriation found in the nature and extent of the powers conferred by the Constitution on the several departments of Government and especially on Congress, for it is necessarily implied that the expenditure of the public money shall not extend to objects beyond the scope of the Government established.

The comprehensive authority for raising revenue, "The Congress shall have power to lay and collect taxes, duties, imposts, and excises, to pay the debts and provide for the common defence and general welfare of the United States," perhaps more clearly limits the power of appropriation, by just implication, to the promotion of objects exclusively national. Within the limits named, which are more implied than expressed, there is no restriction on the power of Congress, except those con-

tained in the fourteenth amendment incident to the late war, to appropriate money from the public treasury.

The usual practice has prevailed ever since the organization of the Government for the President to transmit to Congress, at the opening of each regular session, an estimate in detail of the money required by each of the Executive departments during the ensuing fiscal year, and on the basis of these estimates the appropriations are made. But Congress can make (except for the support of the army) what are called permanent and indefinite appropriations, under which, without further action of Congress, large sums of money are annually withdrawn from the Treasury by the Executive departments. These permanent and indefinite appropriations which Congress in former years deemed it proper to make, have become apparently permanent features in our system, and are in the main for the payment of the interest and principal of the public debt and the cost of collecting the customs revenue. There is, however, a long list of minor permanent and indefinite appropriations, and the tendency is, notwithstanding persistent opposition, to enlarge the list, for such appropriations are convenient to the departments and diminish the labor of Congressional Committees. That abuses should occur under this practice is inevitable. This class of appropriations includes money deposited in the public treasury by private parties for surveys of public lands; thus, while last year Congress appropriated \$400,000 out of the Treasury for that purpose, private parties, in view of the excessive profits of surveying contracts, deposited \$2,052,306.36 to secure such surveys, which is expended without action of Congress. But permanent and indefinite appropriations are mainly confined to the extraordinary expenditures, and the appropriations annually made by Congress substantially express the current ordinary expenditures of the Government.

It is obvious that the authors of the Constitution, while careful to define and limit many of the great powers conferred on the departments of Government, yet in the matters of revenue and expenditure—matters of vital and persistent interest—relied exclusively on the vigilance of the people and the restraining force of public opinion. Hence, the Constitution casts the responsibility of such measures largely on the House of Congress most immediately responsible to the people. "All bills for raising revenue shall originate in the House of Representatives,"

and "the yeas and nays of the members of either House on any question shall, at the desire of one-fifth of those present, be entered on the journal." The Constitution also carefully provides for keeping the people well informed of the action of Congress, especially as to expenditures: "Each House shall keep a journal of its proceedings, and, from time to time, publish the same"; and specially provides that "a regular statement and account of the receipts and expenditures of all public moneys shall be published from time to time."

So it will appear, that while Congress is charged with the control of the public moneys and has the undoubted constitutional power to fix a definite limit on their expenditure, yet because of the practice of permanent and indefinite appropriations, the dependence of Congress on the Executive department for details of the public requirements, and especially the persistent habit in departments and bureaus of making expenditures, and contracts involving expenditures, in excess of the appropriations, which sooner or later, in the form of "Audited Accounts," receive legislative recognition, the responsibility for the expenditures of Government is practically divided between Congress and the Executive departments. The demand for the constant exercise of the powers of the people in the administration of the Government is nowhere more manifest than in the ample, and in a large degree unrestricted powers of Congress in the raising of revenue and its expenditure, and in the tendency in Congress to divide the responsibility for expenditure with the Executive departments, which, while less open to public observation, are the more exposed to unscrupulous raids upon the public funds committed to their charge. Surely, the fathers could indulge the confident belief that in matters that concerned the integrity as well as the burdens of Government, public vigilance would not be suspended.

In the early years of our history there were high motives for frugal government, not only in the impoverished condition of a people just emerging from a great struggle, but in the desire to present a contrast between a free people administering their own affairs and the impoverishing governments of Europe; nor can we doubt that the self-denying statesmen of that day sought to present to the coming ages the example of a Government having in view only the happiness and prosperity of its people. To the close of 1791, from the inauguration of Wash-

ington as President, the revenues were \$4,409,951.19; and the entire expenditure, including \$175,813.88 for pensions, \$1,177,863.03 for interest and \$699,984.23 payment on the public debt, amounted to \$3,797,436.78, leaving still nearly three-quarters of a million of dollars in the Treasury. Passing from this period to the close of the half century, we find that in 1841 the entire current ordinary expenditures (omitting the extraordinary-pensions, interest, and payments on the public debt, for these cannot well be considered in a review of current, ordinary expenditures and belong to specific periods) were \$23,808,405.78. The appropriations for this year, for the ordinary expenditures, were \$22,147,701.91. The expenditure exceeded the appropriations in consequence of Indian war. The appropriations include for the civil list, diplomatic and postal service, \$8,517,079.35, and for the army, navy, fortification, West Point and Indians, \$13,620,566. The civil list includes appropriations for military, geographical and geological surveys. The Executive office is not overlooked, and for that service the whole appropriation is as follows: "For annual repairs of the President's house, gardeners' salary, horse and cart, laborers and tools, and for amount due F. Masi and Company for repairs on furniture, \$2628." And at the foot of this list of appropriations for 1841, the following interesting legend arrests attention: "No new offices created or salaries increased." Such, at the end of half a century, was the force of a great example and public vigilance; and yet, as will appear, the expenditures of 1841 were materially above the average of that period, at least of ensuing years, and exceeded by two million dollars those of the preceding year. Up to this period, the entire expenditures of Government, including pensions and excluding the public debt, was \$632,351,388. Our territory had been vastly extended by two great purchases, and our population had reached beyond seventeen millions.

We are not able as yet to compare our second half century of government with the first; dividing the completed period will indicate the result when it can be done. The appropriations made for the current expenses of the first fiscal year of President Lincoln's administration, which commenced on the first day of July, 1861, excluding a double appropriation for the postal service and the pension list, were \$64,621,603.46. Some increase of military force was included, and the disordered state of the country precludes any just comparison; but during the preceding

decade, as will appear, there was a marked tendency to increased expenditure. The appropriations for the current ordinary expenditures of 1882 were \$148,412,071.46, and for the present fiscal year reach \$179,729,015.21, pensions and public debt in both years excluded. The entire current appropriations for the year are \$295,729,015.21, including \$116,000,000 for the pension list, sixteen millions of which are for deficiencies of the preceding year. A portion of this appropriation for pensions, it is believed, will not be required during this fiscal year. To this is to be added the estimated expenditure of \$80,591,225 under permanent appropriations, making the aggregate for the year \$376,320,240, independent of the sinking fund.

In 1841, at the beginning of our second half century, our population exceeded seventeen millions; in 1883, it is over fifty-three millions, and our current ordinary expenditures, civil list, consular and diplomatic, postal service, army, navy, and miscellaneous (pensions and public debt excluded), have increased on the basis of the appropriations above given, in the period of forty-two years, more than sevenfold. It must be admitted that in some degree growth of population involves some increase in the expenses of our Government, but it cannot be shown that the necessary increase would be even observable except through a considerable period of years.

For several years the prominent, and yet, within reasonable limits, the most justifiable increase of expenditure is noticeable in the post-office department. In 1853, it had reached by slow degrees, \$7,982,957, and in the last fiscal year, \$40,482,021. This is largely attributable to the extension of the railroads and the heavy charges they impose on the Government. The postal service is of especial interest and value to the whole people, yet recent events have demonstrated how readily and plausibly even a great public institution, where integrity is of special value, can be dishonestly employed in the interests of private aggrandizement. But the decline of the old-time frugality is everywhere manifest. The most unexpected objects for expenditure are discovered. The appropriations for the present year contain \$61,676.45 for expenses incurred by gentlemen in their contests for seats in Congress. At the close of our first half century, \$29,128.00 was deemed sufficient for the compensation of the President and the expenses of the Executive office; in President Lincoln's term, \$39,600 was all that was required; while

\$141,164 is barely deemed sufficient for the present year, with \$25,500 for the improvement of the ground on the south and roadways and sidewalks on the north of the Executive mansion. The "horse and cart" at the end of the first half century is the prototype of this. The State department is our most conservative and stationary feature, yet the salaries and incidental expenses of the office (omitting cost of publishing laws in pamphlet form not now incurred by the department) were, during President Lincoln's administration, \$73,800, and for this current year, \$155,830. But the field is too large for details.

Mr. Benton, certainly a very high authority, in his "Thirty Years' View," considering the appropriations for the year 1855, in which he wrote, says :

"The evils of extravagance in government are great. Besides the burden upon the people, it leads to corruption in the Government and to a janissary horde of office-holders to live upon the people while polluting their elections and legislation and poisoning the fountains of public information in molding public opinion to their own purposes. . . . At the same time, it is the opinion of this writer that a practical man, acquainted with the objects for which the federal Government was created and familiar with its financial working from the time its fathers put it into operation, could take his pen and cross out nearly the one-half of these seventy odd millions, and leave the Government in its full vigor for all its proper objects, and more pure by reducing the number of those who live upon the substance of the people."

Mr. Benton, in generalizing, overestimated the expenses for 1855. Omitting the extraordinary expenditures (pensions and the public debt), they were \$54,838,585.39. But when, twenty-eight years later, the appropriations for current annual expenditure have reached \$179,729,015.21, it is absolutely certain that if Mr. Benton's method could be applied in considering the vast body of items which make up the great aggregate, the benefit to the people would, in the elevation of their Government, enormously exceed the saving to their treasury.

The force of public opinion is nowhere, in the conduct of our affairs, so absolute as in this field of expenditure. The war of 1812 had so increased the demands on the Treasury, that in 1816, the ordinary expenditures exceeded twenty-three millions; and yet, at the close of the Fourteenth Congress, the famous "Compensation Act" was passed, enlarging the pay of congressmen from six dollars per day, during the session, to \$1500 per year. This act was deemed mercenary and venal, and aroused the fiercest

indignation throughout the entire country. The obnoxious measure was promptly repealed, but the greater number of the members of Congress who had supported it were promptly and permanently retired from public life; even the matchless eloquence of Mr. Clay barely rescued him from the general wreck. This exhibition of public feeling produced positive results, and the current ordinary expenditures were heavily and persistently reduced. As late as 1823, they were \$8,004,576.07, and in 1829, the last year of President John Q. Adams's administration, \$11,691,615.93.

The log-cabin campaign of 1840 led to a searching inquiry into public expenditure and reanimated the people with admiration and love for the old-time frugality of their Government. This was followed by a period of positive retrenchment; and as late as 1844, the current ordinary expenditures for the year were but \$18,628,099.02. One cannot examine the financial condition of that period and of the preceding years without being impressed with the conviction that the most tempestuous political campaign, when animated by questions and measures of public administration, may have a most wholesome and purifying influence on public affairs.

An event of recent years is still more instructive. In 1873, in the closing hours of the Forty-second Congress, a large number of salaries, including those of the President of the United States and members of Congress, were greatly increased with retroactive compensation to the members of Congress, and the current ordinary appropriations of the session were increased by many millions over those of the preceding year, and by more than forty-one million dollars over the expenditures of the year next preceding that. These measures received at once universal condemnation. A feeling of mingled indignation and disappointment pervaded the country, for it had been the general belief that when the miscellaneous debts incident to the war had been adjusted, a heavy reduction of taxation and expenditure would follow. The press universally held these measures up to public condemnation as the outgrowth of a venality and self-seeking in public employments that could not be endured.

The Forty-third Congress hastened to undo the work of its predecessor so far as was possible; but the public indignation was not appeased; the enormous budget of expenditure was carefully explored, the spirit of the Grange movement, especially

in the West, inspired impartial criticism and independent action, and the House of Representatives underwent a complete revolution. Under that impulse, the current ordinary expenses of the first year for which the Forty-fourth Congress made the appropriations, were reduced to \$116,246,211.01, as against \$165,080,570.34, for the year for which the appropriations involving the enlarged salaries were made. In both instances pensions and the public debt are omitted, but including both would not affect the result. The ordinary expenditures of the next year, for which that Congress made the appropriations, including the army appropriations afterward made, and excluding pensions and public debt, were \$107,326,433.07, since which time the expenditures have increased. In every instance of positive retrenchment, the "deficiencies" which crowd upon the ensuing years have correspondingly diminished.

These landmarks and the current history of the Government demonstrate beyond question that even the most sweeping retrenchments that have ever been made in our expenditures have not embarrassed the public service for an hour; and furthermore, that in a Government like ours there is no safe ground between severe economy and prodigal expenditure; that the administration will either be frugal and honest or lavish and corrupt; and more clearly demonstrate that the only guaranty for frugal and honest government is to be found in the vigilance and fidelity of the people.

The excellence of our system of government, with its towns, townships, cities, parishes, counties, and states, so admirably adapted to the keeping of political power under the eye and within the control of the people, and all united by the Federal Union, cannot be questioned. But with each of these agencies of government employing its measure of taxation; with the steady and remorseless growth of federal expenditure during the last thirty years continued in full vigor, influencing by its great and pernicious example the local governments of this wide-spread system, animating the ever-growing multitude who seek to live off the labor of other men, how long will it be before the evils which have oppressed for centuries the labor of the Old World are transplanted to the New?

A powerful motive for increased expenditure is found in the vicious practice, so long tolerated, of creating and employing public patronage as a reward for partisan services. So long as

the country acquiesces in this abuse of the public service, this disreputable and corrupting practice will continue; new avenues into the public treasury will be discovered and explored; new offices, enlarged salaries, and lucrative contracts in countless variety and in every department of government, will demand an ever-increasing revenue. But the motives for increased expenditure are sufficiently numerous and obvious without this. A motive largely mercenary for entering the public service is fatal to public honor, and it is perfectly safe to predict that any system of civil service reform which proposes to leave the salaries of officers and employés of Government, as now, greatly above the rate of compensation paid in private employments for services requiring an equal or a similar degree of integrity, industry, and capacity, will prove a "delusion and a snare." A blow at the heart of the evil would restore the sentiment of honor to the public service.

Fifty years ago, a distinguished writer in the *NORTH AMERICAN REVIEW*, referring to the Athenian Republic and our own, expressed opinions touching the true policy of our Government, the stronghold of its safety, and the source of the perils to which our free institutions are exposed, the soundness of which has been confirmed by the current events of our history, social and political, of every succeeding year. He said:

"With us government is the protector of personal industry, talent, and happiness; and we are firmly persuaded that however luxury may, with the increase of wealth, diffuse itself among private individuals, frugality is the true policy of the State. . . . With us the great body of the citizens is sure to remain uncontaminated. We have far more to apprehend from the headlong ambition or downright corruption of those who are the depositories of power."

WILLIAM S. HOLMAN.

DEMOCRACY AND MORAL PROGRESS.

MR. WALT WHITMAN, in his recent impetuous, impulsive, but original and striking book, "Specimen Days and Collect," p. 211, uses this strong language: "I say that our New World democracy, however great a success in uplifting the masses out of their slough, in materialistic developments, products, and in a certain highly deceptive superficial intellectuality, is, so far, an almost complete failure in its social aspects and in really grand religious, moral, literary, and æsthetic results. . . . It is as if we were somehow being endowed with a vast and more and more thoroughly appointed body, and then left with little or no soul." And again, p. 206: "For know you not, dear, earnest reader, that the people of our land may all read and write, and may all possess the right to vote, and yet the main things may be entirely lacking." These sentences express in a mild form opinions that are frequent in this remarkable volume, which, by the way, will be a surprise to some who regard their author as an altogether fleshly poet.

Now, Mr. Whitman speaks from experience. He has traveled over the country, has lived in remote parts of it, and has closely studied the people and their institutions. He is, moreover, an enthusiastic believer in republican government, perhaps the most ardent democrat living. This criticism is the result of his faith. He admonishes in the spirit of love. He is severe because he hopes so much, and sees so much to be at stake in the experiment of liberty.

To prognosticate the future of democracy is not an easy task, but oversensitiveness to fair criticism will not make it easier. The issues are concealed from all but honest and penetrating eyes; and even these must be clear of the film of prejudice. It is desirable to know the facts; but the facts are not readily accessible. Least of all will they disclose themselves to optimist or pessimist. The

times have no doubt gone by when men like William Cowper can read aloud to ladies a book like "Joseph Andrews." But neither the reader nor the listeners could have looked without horror at the view presented by a modern ball-room, at the waltzes, polkas, and general dance movements of young men and women of society. Conscientiousness may have changed its front, while conscience may not have gained in sensibility. Immorality has assumed another form; but is it so certain that its character is essentially altered, or its degree abated?

"They tell me, Sir John," said George III. to one of his favorites, "that you love a glass of wine." "Those who have so informed your majesty," was the reply, "have done me great injustice. They should have said, a bottle." What courtier would venture, in these days, to make such a remark to a king? Even at banquets such drinking as was common among gentlemen, half a century ago, is unknown and would be considered disgraceful. The most refined people take very little wine, even of the lightest. This seems an immense advance. But who can say how much of the improvement may be due to moral principle, how much to the fashion of the period in which we live, and how much to the regard for the conditions of bodily health, so remarkable in an industrial age like our own, which obliges even gentlemen to have clear heads? No temperance indicates moral improvement but such as may be attributed to moral considerations. Respect for health or economy evinces a fine sort of selfishness, nothing more; and respect for fashionable usage does not indicate so much as that. The elegant English essayist, Robert L. Stevenson, suggests that Thoreau abstained from wine because, living in America, he never tasted any that was good. It is more likely that he abstained because he regarded the drinking of wine as a sensual indulgence; or because he dreaded the evil effects of it on society; or because he thought that, like tea and coffee, wine would deaden his vital power, and so diminish his enjoyment of nature. Either of these reasons may be esteemed noble. But it is not probable that many temperate people can claim motives as worthy for their temperance. If they could, a higher strain of conviction on this subject would prevail, a conviction that would close bar-rooms, and render "corner-groceries" unprofitable; for a power of moral conviction equal to this would raise the level of common opinion on the subject.

In 1770, Horace Walpole wrote to a friend: "I do not know a tea-spoonful of news. I could tell you what was trumps, but that was all I heard." "The gaming," he said, "is worthy the decline of our empire. The young men lose five, ten, fifteen thousand pounds in an evening." Putting together the things best worth finding, Walpole enumerates: the longitude, the philosopher's stone, the certificate of the Duchess of Kingston's first marriage, the missing books of Livy, and all that Charles Fox had lost. The losses of Fox at the gaming table were notorious. Gambling was the fashion among gentlemen and ladies in that generation. To be in debt, to borrow money, was universal among people in society. So completely established was the custom that no disgrace, no feeling of moral degradation was attached to it. In spite of his recklessness, Fox not only kept his social position, but preserved his sweetness of character. Nothing of the kind would be possible now. Gambling has been remanded to the lower orders of men. The law is against it; custom frowns on it; the practice is banished from respectable company. But has it been exterminated, or has it merely assumed another form? A recent article in this Review on the "Ethics of Gambling," which some thought too severe, drew from a Western man a protest accompanied with terrible statistics, all going to show that the writer of the article had "hardly scratched the surface of the subject." The evil, it was maintained, threatened to undermine our institutions, being more virulent in a democracy than it was in the time of Fox, the fences which confined it to a certain class being taken down, and a coarser instinct being admitted to the gratification, the excitements of which are extended to business and politics as well as to amusement.

But will not popular education, so general under our democratic forms, correct this lamentable tendency? Alas! there is too much ground for thinking that education, instead of raising people above their level of actual attainment, simply supplies them with what they desire, and thus indirectly confirms in them a low standard of taste. Ideal, heroic, stimulating studies like Greek, Latin, Philosophy, are neglected for "useful" lessons in physics or dietetics. Besides, education waits on character; and, unless the style of character be lofty and strong, education may turn out to be a mischief, like putting improved tools into the hands of a burglar. Mr. Herbert Spencer, who called attention to this

fact a generation ago in his "Social Statics," has lately repeated the warning. The old saying, "In much wisdom" (that is, learning) "is much grief," may be true in more senses than one; and its truth may be particularly evident in a democracy where it is left with average people to decide what shall be taught in schools. In a society like our own, the passion for "getting on" operates with fearful power upon intellectual ambition. Success is the goal toward which all are striving, and we know what success means. No doubt schools and libraries multiply, but these alone do not attest the moral elevation by which the growth of communities is measured. They are certainly to be encouraged, but along with them must go efforts at making a grander type of man; otherwise knowledge may prove a snare. In older countries ancient universities, institutes, the influence of an educated class, the traditions of centuries, guarantee the permanence of "liberal studies"; but here no such safeguards exist; the danger of accommodating to popular taste the standard of mental accomplishment is, consequently, greater with us than it is in England or on the continent of Europe.

Whether or no democratic institutions are favorable to political purity, may be left to the decision of those who will take the trouble to compare the ideal of our state with the condition of things actually existing in Washington, New York, or any center of political activity. The power of "the machine," the prevalence of "wire-pulling," the faith in party men and party measures, the confidence in partisan tactics, the strength of the doctrine that to the victor belong the spoils, the difficulty of establishing what seems the common-sense principle of Civil Service Reform, the general opinion that ours must always be an administration by parties, and that an administration by parties must from the nature of the case be to a considerable degree venal, do not promise a celestial Utopia either in the near or distant future. Granting that England's anticipation of the principle of merit in the choice of her civil functionaries may be due in a measure to her habit of keeping the appointment of officials in select hands, leaving to Government the task of appointing its servants, while politicians discuss other matters more within their conceded province, one might suppose that such an example, though not literally imitable, would act as an encouragement to the principle rather than as a disapproval of it,—might, at least, animate us to engraft so fine a

system upon our democratic institutions and prove that republics can be just. The greatness of the difficulty in the United States ought to nerve Americans to the greater endeavor. Unfortunately, this inference is not often drawn. Politicians who have grown gray in service enthusiastically extol the advantages of the "spoils system," which, notwithstanding their eulogium, is practically the opprobrium of democratic politics, threatening more than anything else to drag our institutions through the mire. The few men who toil at efforts to elevate them must take the position of reformers, as if the principle they recommend were an innovation savoring of aristocracy. No sign so clearly indicates a tendency to ignoble greed as this, none so evidently exhibits a base appetite for "the loaves and fishes." In a word, statesmanship of the higher order is, by confession, rare in governments that regard statesmanship as a natural growth. The democratic faith in "the bare man" is hardly favorable to dignity or excellence of attainment, while the frequent change in official stations is all but fatal to stability of personal character. No doubt the future may repair the injury of the present time; but the evil is actual not prospective, and there is danger that it will become too deeply rooted to be eradicated without revolution. At all events, the situation can be mended now better than it can be half a century hence, and the hope of amendment, if it comes, will not be due to the average construction put upon the democratic idea, so much as to the prevalence of reason over instinct — that is, to moral rather than political causes.

Does democracy promise an elevation of the religious sentiment? That is too large a question to be answered here in a few sentences. One or two specifications must suffice. The writer of these lines attended lately an Episcopal church. It chanced to be Communion Sunday, when the mystery of supernatural grace was to be celebrated for the spiritual benefit of believers. The minister, a "broad Churchman,"—so very broad that he passed over the distinctions which are understood to divide the "faithful" from the "faithless,"—gave an invitation that might have been accepted by a Unitarian, a Deist, a Rationalist: an invitation harder to resist than that of an old-fashioned Socinian. This was a concession to the untheological spirit so prevalent in our communities. But was it an evidence of a moral advance as it was, unquestionably, of a sentimental one? Is it a sign of

moral advance that a distinguished "orthodox" preacher, an American of Americans, a democrat in the grain, applies the epithet "hideous" to doctrines which he himself calls "fundamental to the whole orthodox theology of the world"? Such a declaration is entirely in accordance with the general democratic sentiment, but certainly it is inconsistent with orthodox profession. The wonder is that it should be so loudly applauded by people of exact thinking, who ought to know the meaning of language. This circumstance alone shows how deeply the democratic sentiment has penetrated into the recesses of the mind and has obliterated the ancient distinctions of creed. The doctrine that one man is as good as another leads to an abrogation of the supernatural belief on which the church rests, and must, sooner or later, disintegrate the unity of faith. This appears from the satisfaction with which hearty democrats welcome the leveling of religious distinctions, the overthrow of ecclesiastical barriers, the abolition of doctrinal tests. In a word, the restoration of moral fiber to the religious sense will scarcely come through an extension of the democratic principle as commonly understood.

Mr. Emerson, in his address on the "Progress of Culture," read before the Phi Beta Kappa Society, at Cambridge, July 18, 1867, enumerates the astonishing gains made by the republican idea within a few years, with the comment: "Now, if any one say we have had enough of these boastful recitals, then I say, happy is the land wherein benefits like these have grown trite and commonplace." Mr. Emerson, as we know, was a dauntless optimist, and his prophecy was made nearly twenty years ago, soon after the remarkable outbreak of hopefulness which followed the civil war. After the virtual abolition of slavery, everything seemed possible in America. All questions found on easy answer. The energy of the people had not subsided, and might be counted on as adequate to the severest tasks. Candor compels the admission that the enthusiastic prediction has not been fulfilled. Some of the reforms have not been accomplished; others have been achieved in advance of us by aristocratic communities, like that of England, for example; several were wrought out under the sway of selfish motives, "the search for just rules affecting labor," "the insurance of life and limb," for instance. "The marked ethical quality of the innovations urged and adopted" which the orator insists on, must

not be hastily accredited to the democratic idea, whatever may be our opinion of its reality. Similar results attend the progress of civilization in all countries. The reform in regard to women is more advanced in London than in New-York, at Cambridge than at Harvard. The agitation for the abolition of capital punishment, for the sanitary arrangement of prisons, for the elevation of the working classes, goes on in Europe as energetically as here; in fact, much more so, most of the literature appertaining to those subjects being imported from abroad, through England. Let us admit that there is moral progress; but let us admit, at the same time, that the progress is a result of civilization in the world, not in the Western Hemisphere especially. It may, indeed, be ascribed to the growth of a humanitarian principle, but it is not yet demonstrated that this principle attains its best results under an unrestricted democracy. The modified democracy of Great Britain, under what Mr. M. D. Conway has well called "a crowned republic," may, in the end, prove favorable to ethical interests. It is, at all events, pertinent to ask in what degree moral advance is indebted to the effort necessary to overcome obstacles. Thus far the experience of mankind proves that "easy virtue" is but another name for vice. Moral endeavor usually precedes moral improvement. Reform must not be facile; if it is, the moral element will assuredly be wanting in its composition. The drift of nature is not toward moral perfection, unless we include in nature the regenerating forces which keep it up to its highest level by stimulating the intellectual and spiritual powers. Democracy reckons on the force of unrestrained human nature; but that is force of unrestrained instinct, and force of unrestrained instinct has not hitherto held out promise of moral elevation. Does it appear likely that America will reverse the tradition of all the ages by rendering discipline superfluous? Is there evidence that raw liberty is the one condition needful for "realizing the infinite"? Does observation show that the tendency of our business, society, literature, is heavenward? Listen to the talk of our parlors; look at the popular books or papers; consider the degradation of the stage, made a platform for the display of personal attractions; note the passion for scenic effect, for decoration, for amusement. Such traits do not proclaim, surely, the triumph of soul over sense. Are these the heralds that announce the coming of the Son of Man?

It may be conceded that the enormous production of wealth in America, coupled with its general diffusion among all classes of men, is favorable to the prevalence in centers of wealth, all over the country, of the outward attributes of civilization—costly pictures, houses, drapery, dresses, carriages, horses, entertainments. It may even be conceded that forms of social elegance and refinement of manners, accompanied by accomplishments in music, painting, languages, may be found in remote places of the continent where money has accumulated. Wealth enables many to travel in foreign lands. The railroads make communication easy. Visitors come from far-off cities. There must be theaters, opera-houses, lecture halls. The Old World sends its dukes, scholars, writers, artists of every description, to see the country, or to make gain out of its inhabitants; they must be received, attended to, imitated. European ideas, ways, institutions are thus domesticated in our large towns; European fashions take root. This is inevitable. In some respects it works us harm by overlaying our native growth; in other respects it does us good by introducing the results of mature experience. But whether it brings harm or good the product of the contribution should not be attributed to the spread of democratic ideas. Institutions are not responsible for what money has bought; as little can democracy claim what aristocracy has created.

One may go so far as to admit that lovely manners and high conversation are found in many a Western city, without granting the regenerating efficacy of democratic principles. For, where those principles have full sway, such admirable products are least common. Hear what the "Nation," of September 28, 1882, has to say bearing on these points:

"A life of money-getting in the United States is now usually wound up by the construction of a palace, in which a successful dry-goods man, or pork-packer, or operator in stocks drags out the evening of his days in the midst of taste and splendor, for the enjoyment of which he has neither a natural nor acquired capacity."

If any are unwilling to accept the judgment of the "Nation" on the ground that it is not a fervent advocate of republican ideas, they may be inclined to listen to the Boston "Herald," a paper against which no such accusation can be made. Says the "Herald":

"It is a matter of national shame and regret that our moneyed aristocracy is more idealess and frivolous than was ever any other aristocracy, past or present. Because, in all foreign aristocracies there is a certain percentage of persons who give a good account of themselves in literature, reflective thought, science, and art. But our *born* moneyed class are *minus* any intellectual achievements, for which they have such splendid opportunities of leisure, travel, and culture."

This is a severer verdict than that pronounced by the "Nation," and it comes from a city that is famous in revolutionary history, the home of Theodore Parker, and of Wendell Phillips, and of Charles Sumner, to name no other champions of the people's liberty. The "Herald's" charge cannot be put by with the assertion that ours is a young country; for "if such things can be done in the green tree, what may be done in the dry"? Nor can it be set aside by saying that the true democratic spirit has not yet gone into operation, for that is the precise point in question, Has it, or has it not? If it has, the description above quoted stands uncorrected. If it has not, the sooner a new quality is introduced into it the better. Neither paper tells the whole story of American society, for neither paper makes allowance for the influence of woman, which is more actively prevailing in the United States than it is anywhere in Europe or England, and is mainly the cause of whatever social refinement there is. Still, we must remember that women are not as yet responsible for the working of democratic institutions, nor is their influence to be counted in any fair estimate of the advantage hoped for from the democratic idea. Theirs is the use of money earned by laborious husbands and fathers; theirs is the leisure; theirs the opportunity and the desire for travel; theirs the love of music, the taste for pictures, the passion for grace and beauty in the house; for richness and elegance of dress; for luxury of effect; but theirs is not, thus far, a direct accountability for the success or failure of the popular system. Whether they will ever share such accountability, or whether their full participation will prove a benefit, remains a matter of mere conjecture. Here, it is enough to say that whatever bloom they add to our democracy is purely feminine, due to their genius, not to the democratic idea. That is in male hands, and has not, hitherto, given conspicuous promise of glory.

But now it is time to present the other side, to look for the signs of hope in republican institutions. On any fair estimate, the emancipation of moral power, without regard to social conditions,

may justly be put down as a result of the democratic idea. If the republican principle lets loose the lower passions of human nature, it grants full freedom to the exercise of the higher. It removes obstacles; it pulls down barriers; it throws open the field of conscience. Under it all power is available, whether of man or woman; and moral power is honored in the person of its possessor, however humble or however elevated he may be. Respect is paid to the person, not to the circumstance. In monarchical or despotic communities qualities, to be recognized, must bear the stamp of class dignity, rank, or title. The worthy cause must be taken up by some outwardly accredited authority. Plebeian virtue, except in very extraordinary cases, is undemonstrative or disallowed. But a republic gives to all an equal chance and stimulates to activity every particle of spiritual vigor. To appreciate the degree in which this is the case, one must have an opportunity of contrasting the moral liberty that is permitted by our forms with the limitation that is placed on intellectual endeavor in countries which are only comparatively free like England. Even there the spell of conventional respectability lies heavily on all but a few choice spirits. Hence the angry, violent, explosive force with which conscience breaks out whenever occasion offers or evils become unbearable. Hence socialism, communism, nihilism, in their different phases, which present the sense of right as destructive or anarchical. As Emerson puts it:

"The opinion of the million was the terror of the world, and it was attempted either to dissipate it by amusing nations, or to pile it over with strata of society — a layer of soldiers; over that a layer of lords, and a king on the top; with clamps and hoops of castles, garrisons, and police. The Fultons and Watts of politics, believing in unity, saw that it was a power; and by satisfying it (as justice satisfies everybody) through a different disposition of society,—grouping it on a level, instead of piling it into a mountain,—they have contrived to make of this terror the most harmless and energetic form of a state."

The truth of this is apparent in the efforts at reform which are conspicuous in America, and which can be traced directly to the democratic principle; in the concern of leading minds for the welfare of the people; in the examples of public spirit; in the consecration of talent to the general good; in the prevalence of "isms,"—a wild, but certain sign of aspiration after unattained excellence. A striking feature of moral reform in America is the participation in it of the best minds, the noblest souls, the

men and women of choicest nurture and highest social position. Such feel most keenly their responsibility for the system they live under. They are not idlers, not place-hunters, not pleasure seekers, but free givers of time and strength to the cause of popular enlightenment and progress. These, though few, led the assault on slavery. These are champions of civil service equity. These try to get at the heart of socialism and kindred movements which enlist, in the Old World, the ignorant, passionate, thoughtless, who, having none to fight for them, fight for their own side. In America, to be gifted as a reformer is regarded as a privilege even by reformers themselves.

It has been said that the democratic principle, as commonly interpreted and exemplified, takes the moral fiber out of religion; and so, hitherto, it has done. But the natural must come before the spiritual; the sentimental precedes the intellectual. In the transition from theological dogmatism to intelligent truth, the way lies through aversion to definite opinions. Charity, which covers a multitude of sins, goes in advance of character, which is the fruit of spiritual ideas, and which presupposes thought; so that the present disintegration may prepare the religious mind for some worthier statement of doctrine. The broad church may yet serve as an introduction to the true church, which in due time will be established by the free endeavor of spirits at once enlightened and devout,—spirits that are more concerned to find what is true than what is comfortable, what will save than what will please. Thus the boundless freedom of our institutions will be made to work compensation for the slipshod character of much of our speculation.

In fact, one can hardly say enough about the far-reaching tendency of the most cultivated men and women in our communities, whether writers, preachers, journalists, professors, or obscure toilers. A foreign physician of great distinction in his own country was so fascinated by the opportunity afforded in New York that he resolved to establish himself there, though his relatives lived in Germany, and his reputation as a specialist was fixed in Vienna, while here living was expensive and he had every thing to do. What a commentary on the educated Americans who turn their backs on their own country and live abroad because it is cheaper and easier!

All that can be justly claimed for the democratic idea is opportunity, but opportunity includes all promise; a word of

urgent exhortation must be spoken, therefore, to teachers, preachers, authors, guides of public opinion, on whom the fulfillment of this promise depends. They must work hard if they would counteract the downward tendencies of democratic ideas as vulgarly expounded. Theirs is no holiday task. They are put upon their intelligence and their honor. They seem to be few and far apart in space, but their influence is great, and one bond unites them — the desire to lift democracy from the dust and answer cavilers by facts. Our cause — the cause of a pure democracy or rule of the people — is at stake. Our achievement is in the time to come, not in time past or present. Our victory is yet to win, and it is to be won over those who maintain that the rule of the people in their own behalf is an illusion which experience will rudely dispel. It is for true believers in the republic to prove such a prediction untrue. Where there is no government to prescribe opinion, but only public sentiment, which reflects the controlling mind of the many, the influence of the wisest and best is of the greatest importance. If what has been said is true, the question of the moral import of the democratic system is not a matter of years but of direction, and direction is not the same thing as tendency. Tendency represents unassisted impulse. Direction stands for the utmost that can be achieved by effort. Tendency is the bent of the prevailing will. Direction is the turn of that will to noble ends.

O. B. FROTHINGHAM.

NEEDED REFORMS IN PRISON MANAGEMENT.

REFORMS are needed. The jails of to-day are, with here and there an exception, substantially what Howard in the eighteenth century found jails to be. The fault is largely due to construction. Jails on the "Pennsylvania Plan," supplying separate confinement for each prisoner, will provide the needed reforms for jails. Prisons of later date, designed not only for detention but punishment as well, have scarcely been improved, though of prison associations and boards there are many, and prison congresses, State, National and International, have been held, with their valuable discussions and issue of reports. Prisons for reformation are still of later origin, but they do not reform in any such general and efficient way as to perceptibly affect the volume of recorded crimes. Given the number of the population to the square mile, with absence of war, pestilence, famine, or monetary revulsions, it is said the annual aggregate of crimes in a district may be as accurately foretold as the death-rate of a people can be calculated by Carlisle's tables. Then, there is abroad a popular demand for reforms; the communistic sentiment of the time calls for them, hoping for pecuniary benefits, and the politician echoes the cry for partisan effect, while the press and the populace repeat it from motives selfish or sentimental as the case may be. Finally, the thoughtful, the philanthropic and public-spirited, saddened at sight of so much sin and alarmed at the growth of crime, ask for an advance in both the theory and practice of "crime treatment," that crimes may be diminished and criminals reclaimed. With so much room for reforms, the general demand cannot properly be put aside; there must be underneath it all a common source of good impulse that needs only to be rightly directed.

The first great need in this matter is a better sentiment, among prison governors and the public, as to the true pur-

pose of prisons and treatment of criminals for crime. There is an almost universal demand for retaliation, or at best a retributing of evil for evil. What the public sense for the time approves is named justice, but that is often a misnomer: for, under the name of justice, injustice is inflicted upon criminals, and through improper release of confirmed criminals, before or after conviction, society is unjustly dealt with. This popular demand, as expressed in our criminal laws and their administration, is the bane of good government, either encourages the criminal or consigns him to degradation, and tends to confirm rather than cure the criminal traits of character. Could this current sentiment be replaced with the passionless demand that every criminal when once fairly convicted shall be reasonably cured of his criminality as the only condition of freedom again, the primary requisite for reformed prison management would be reached. Neither punishment for the sake of it, nor pardon for the pleasure of it, but punishment and pardon, either or both, when promotive of reformation—that is the only real security society can have from known criminals. Suitable laws and systems of prison management based on such a sentiment will supply the second needed reform, namely: A motive operating powerfully upon criminals to cause them to relinquish their practices and return to regular industry with right use of citizenship.

An analysis of human motives brings us always to avoidance of pain or pursuit of pleasure as the active principle in conduct; but since one man's pain is another's pleasure, and by the marvelous instinctive adjustment to environment the pain of to-day sometimes becomes the pleasure of to-morrow, it is simply impossible by any schedule of predetermined penalties to supply for the mass of criminals an adequate deterrent or reformative motive. The history of crimes and punishments throughout the civilized world sustains the statement of Beccaria, that the public mind becomes habituated to penalties, so that in the space of a hundred years the gibbet terrifies no more than fines or imprisonment. No doubt the innate love of liberty and natural repugnance to the privations of imprisonment are facts with all men, and warrant the general application of imprisonment for crime. It is not possible, however, and therefore not properly the province of legislation, to precisely prescribe either the pains or duration of imprisonment. These, within due bounds, should

be left to the prison governors, to be determined and varied from time to time for reformation, according to the idiosyncrasy and ever-changing subjective state of the criminal in confinement. Prison governors thus charged with the protection of society from fresh crimes by criminals, through their cure or continued restraint, are clothed with great powers, and should be held to strict accountability. They must not be trammelled by the meddlesome interference of partisanship, whether political or religious. Due protection from criminals, involving as it does their reformation or detention in custody, naturally necessitates a systematic if not positively a scientific treatment, which is only practicable when the prisons are on a plane above, beyond, and outside of partisanship or prejudice. Therefore, the third needed reform is here stated to be the removal of prison management entirely out of the sphere of partisan politics and denominationalism.

Coming now to the more practical reforms, which may be wrought at will when the three above-named general conditions exist, the first to be named is a classification of criminals immured. There has sprung up a kind of natural separation of different classes of criminals, but it is imperfect and ineffective. The sexes in prison are uniformly separated; unless there is an exceptional and exceptionable county-jail where the sexes are allowed to mingle, the principle of sex separation in prison is usually accepted. In some of the States where the color line remains, the separation of whites and blacks is necessary or politic; in European or northern prisons it is unnecessary. The separation of youthful from mature criminals is conceded to be serviceable. The very plausible idea that prisoners should be classified "according to the character and circumstances of the crime" is fallacious, if the object is to protect the novice from the contamination of experienced criminals; for it is a common fact that first offenders are guilty of high crimes and habitual criminals commit venial offenses. The technical title of the crime is not a sure index of the offender's character. There are, of course, professional criminals addicted to particular crimes that call for and develop distinctive traits, but comparatively few criminals are "professionals," and even these turn aside sometimes to crimes of another grade; while all grades of crime attract and engage the youthful and inexperienced. The distinctions of the criminal statutes are based mainly on the amount of damage done, which

is often determined by accident. The same hand and intent may govern the harmless thrust and drive home the deadly stiletto; larceny is of one degree or another according to the opportunity to steal; the burglar breaks and enters usually without thought or knowledge of the statutory definitions determining the grade of his crime. For purposes of classification, conduct in prison, as conduct is generally rated by prison officials, is not a satisfactory criterion, but it is possible to make it so. Under a prison system that gives play to the natural impulses of the prisoner when in contact with conditions somewhat analogous to free society, the fitness for free life may be very accurately ascertained. The experienced prison manager must remember surprises when his good man in prison has gone "to the dogs" on his release, while the troublesome customer has turned out well. All these facts of sex, color, age, crime, and conduct may have an influence in classifying criminals; but none of them, separately considered, constitutes the true basis. It is the real diversity of character among them, to be discerned after the wisest scrutiny and fullest opportunity to apply tests from time to time. The scrutiny must include somewhat of the ancestral history, much of the early environment, and a careful personal examination of the criminal himself as to his physical quality and condition, his mental capacity and culture or unculture, and also his moral susceptibility and his sensitiveness or apathy in view of his crime and its consequences.

Classification may be effected by a general separation of prisoners into two divisions immediately on conviction, either by the sentence of the court or the central governing authority of the prisons themselves, the susceptible to one division, the apparently incorrigible to another, subject to transfer afterward by the prison governors from one division to the other to perfect this general classification. The prisoners of a State may thus be separated in different prison establishments or in a single prison. In the division of susceptibles, the ruling aim in administration would naturally be reformation and early restoration to liberty; and for the other, the incorrigibles, a more rigorous *régime* would be provided, and probably a longer period of detention would be required. The further classification within the two general divisions and in each separate establishment thereof should be into three grades without separation; that is to say, with limited and supervised association,

and then progress toward liberation to be so conditioned that it shall involve of necessity on the part of the prisoner an actual progress of reformation.

Another much-needed practical reform is the compulsory education of prisoners. It is high time the farce were ended of placing criminals in durance, to be worked simply for the profits of their labor, preached to and soon released, unchanged, upon the community. There is no protection without reformation, and there is no reformation without education. The criminal must outgrow his criminality, and the growth can be, and therefore should be, forced if necessary. Education, using the term in its broad and comprehensive sense, is at once the means, and the process, and no other word so well expresses the product we call reformation. It involves training to proper self-regulation and to efficient industrial application, and at least an increase of mental and moral illumination. The present practice of releasing criminals without improved impulses, unfitted for and without access to decent associations, without visible means of support, whether of money, occupation or capacity; but, on the other hand, as is too often the case, with an added impulse and power for evil, is both absurd and dangerous. Said a convict: "We reached New York at evening with what remained of the five dollars given at the door of the prison when released that day. I had a merry night of it, and was immediately on the road again."

Mr. George W. Cable estimates at a quarter of a million the ex-convicts abroad in the United States, of which there must be in New York full twenty thousand. The Secretary of State reports, for 1881, the names of eleven hundred and twenty-nine convicts dismissed during that year from the three long-term prisons alone, while of felons and misdemeanants both it is safe to say that there are ten thousand of them annually emptied from the prisons into society in the same State. The country is overrun with released criminals, carrying to the youth of the classes they mingle with the contamination of their own criminal character. Let the prisons be renovated. Put away retribution, restrain sentimentalism; sentence criminals to be restrained or reformed as they may elect or be able; then wield this mighty motive, their love of liberty, for their education until they properly discern between right and wrong as principles of action, until the better impulses instinctively preponderate, and sufficient strength of mind and will is developed to consummate the

good choice when tempted to evil. And, for those that will not or, unfortunately, cannot receive such culture, let them remain restrained to such extent and in such manner as best protects society from their further crimes.

The prisoner put through this training should, on his return to society, have a fair chance to build himself up, and it is the duty as well as the wise policy of the State, through proper officers, to see that he has it. It will be a most salutary reform when the prisoner, previous to his final release from legal restraint, is completely rehabilitated. He must be actually introduced into suitable permanent employment, surrounded with reasonably good influences, and should be officially supervised until the habit is formed of saving from his earnings, serving faithfully, and properly behaving himself in ordinary society. Passing, while in confinement, through a graduated course of training, so conditioned that actual progress of improvement must be made, he is, on reaching a point of probable safe release, at once restored to the rights, the privileges, and the obligations, too, of good citizenship, to be under observation until established in well-doing and re-adjusted to current affairs. He is thus protected from the temptations of idleness, friendlessness, and unrestrained liberty; at the same time, through the fact of his legal liabilities persisting for a time, his new found purposes and powers are stimulated, and society retains some guarantee against further criminal conduct. This is not the English ticket-of-leave system, though somewhat similar. There is an important difference, for the English system involves police supervision, keeping the prisoner within the category of suspects and in contact with the governmental machinery for the detection and conviction of criminals; while this is parole under State guardianship, and he is responsible to officers who seek his security in a right use of liberty, instead of detectives, district attorneys, and the directors of penitentiaries who seek his conviction and confinement.

In the disciplinary government of prisoners, for individual treatment the *en masse* plan needs to be substituted. Officers must be better informed of the differentia of criminals as a class and from each other. The Spanish writer, Señor Arenal, says:

"In the prisoner who steals, two things are observable,—the thief and the man. The thief constitutes the diseased part, the man the sound part. No two are alike; so that two men breaking the law under the same external circumstances may enter upon imprisonment with impressions totally dif-

ferent. The malady may be the same, but the internal resources to vanquish it will greatly vary."

Failing to perceive this, outraged society sometimes crushes the man with the criminal, or fosters the criminal with sentimentalism lavished upon the man. Prison officers, seeing only the criminal, constantly antagonizing him, conserve not the man until manliness from disuse dies out, while the criminal by the activity of opposition thrives and becomes strong. These diverse qualities, differently combined, discoverable in every criminal, are of necessity to be treated in conjunction: to repress the one and develop the other is the process of reformation; evil cannot be cured with evil; not until evil is overcome of good is any man reformed. To discern the one from the other in the same individual requires a competent, thoughtful, interested mind constantly in contact with criminals; and when this personal work is properly done by the chief officer of a prison, he will be as accessible to all as is the principal of a school or manager of a manufactory. Then will better results be wrought, and vain will be the search for neglect and cruelty often publicly charged and investigated.

Since imprisonment is for protection, the disciplinary management should be not punitive but remedial; prison punishments for correction only, never for retribution, give perfection of discipline in proportion to the wisdom and skill of the governors. Legislative restrictions and public accusations, revealing as they do a lack of confidence, often necessitate severities that would not otherwise be required. The limits of vested authority in this matter must be broad: good discipline means the voluntary cheerful obedience of prisoners with the least of punishments. The favorable conditions for it are:

First.—Power vested in the managers.

Second.—Power wisely used for remedial ends alone.

Third.—Power, in action, closely scrutinized.

The demagogic demand for reform in the industrial employment of prisoners does not, judging from the reasons publicly given, entitle it to space here for discussion. That prisoners confined under sentence must be employed, nobody will deny; their employment mainly at mechanical pursuits is a necessity if they are to be reclaimed, and also almost a custodial disciplinary and pecuniary necessity if irreclaimable. If, then, prisoners are to be employed, and at mechanical work, it matters little,

as prisons now are, whether it be by the contract system or on the public account plan. The latter may be made more favorable to reformation in prisons where that object is rationally sought. There is no positive difference as relates to labor and mercantile competition. The amount of income to be derived by the State will be greater or less from either system, according to circumstances; the proportion of income does not inhere in either. Under classification, as previously described, the industries of the incorrigible division would be mainly for production of income, and naturally on the contract system, though not necessarily so. The real incorrigibles constitute less than one-half of the prisoners of the State, so that there would be at once a diminution of convict contract labor equal to full fifty per cent. of the whole, which, with wise selection of industries for them, ought, when they are earning their own subsistence, as they could easily do, to satisfy all who now sincerely oppose the convict contract system.

The susceptible class should and would be employed at a greater variety of trades, including some of the higher mechanic arts; employed on public account or under a modified form of contract, as by the piece or process, or on the principle of partitioning the profits of each separate industry between the State and expert managers, whose office would mainly be to prepare the prisoners for success in business when released. This last is the really needed reform in prison industries, namely: that the purpose shall be to place the prisoner on release in such a position in society as he would or should have filled had he refrained from crime and been a good citizen. That it were better for all if the criminal had found active, honorable place in legitimate industry, all must admit; it follows, then, that it is best for all that he be fitted while imprisoned for such place. No fair-minded man, manufacturer, mechanic, or laborer, will object to such employment for such an end. To classify and employ prisoners in this way will go far toward settling the difficulties that now environ the prison labor question.

Yet another reform is needed. It is in the ministrations of religion to prisoners. Reform its partisanship; it is too often factitious or feeble, and is fragmentary. The religious influencing of prisoners must be made a part of a unified system of their general treatment; it properly belongs to the educational function. Because the mass of criminals in prison are below the

point of development where ordinary religious influences can lodge, a preliminary preparation of cultivation is absolutely necessary: obstacles to the apprehension as well as reception of religious ideas and benign spiritual energies must be cleared away. The religious development of any people is dependent on varied social influences; the wise religious guide brings us to the recognition of religion in our practical life: so the teacher of religion to prisoners needs to harmonize his work with other departments of the prison administration, and adapt his instructions to the particular state and condition of the criminal. There is room for improvement in the time and manner of such ministrations. A systematic course of teaching should supplement simple exhortation, and a steady pressure of truth and moral means with (rather than against) the industrial and purely educational efforts, should replace desultory and sentimental methods. The great mass of first offenders may be reformed, and but a small proportion of prisoners are irreclaimable when with right means and methods reclamation is really sought. Every reformatory prison should reproduce the conditions of free life as near as may be; the requirements of good citizenship should be enforced upon prisoners until they show their purpose and ability to comply with them when released.

There are, then, three classes of reforms to be brought about by these several familiar agencies: 1st, separate confinement in jails for all prisoners therein, the creating of a better public sense of the true purpose of imprisonment, and the removal of prisons from all partisan interference,—these to be brought about by agitation and suitable legislation; 2d, the classification of prisoners, their education while in prison, and their complete rehabilitation when released, to be accomplished by the general governing administration of prisons with suitable legislation; 3d, the industrial and remedial treatment, with thorough preparatory industrial and moral training. Some who read this paper will live to see such a prison system generally adopted. Its feasibility is fully confirmed by the success of present experiments. With the reforms here named, crime will feel the force of repression, its recorded aggregate will diminish, or at least its present rank growth will be stayed.

Z. R. BROCKWAY.

SCIENCE AND THE IMAGINATION.

DO WE not all give ourselves needless anxiety by defining the province of art, and denouncing whatever will not fit into our definition, and by magnifying the difference between science and literature? These appear to be separate sources of trouble, but possibly they are not so remote from each other as may at first appear. Art, we are told, has to do with the emotions, and the emotions are as sharply distinguished from the intellect as are the various regions on a phrenologist's cast of the head. It is the duty of the painter, for instance, we are fond of saying, to represent the emotions by means of his brushes and pigments, and with that he is to stop. The same rule applies to literature. Yet, although a painter belongs to a profession that more, perhaps, than any other depends on tricks and rule of thumb, does he examine the emotions till he finds one unrepresented and proceed to illustrate that? Does a poet run over the work of his contemporaries until he notices that one passion, as, for example, jealousy, has been for some time neglected, and then try to fill up the the gap? Possibly this is the way Joanna Baillie wrote her plays, but then Joanna Baillie was not a poet.

Fortunately, the artist concerns himself very little about the province of art. The critics may define this as they please; he is inspired, not by their definitions, but by the tendency of the thought of his time. This is what makes him what he is. In other words, our painters and poets are what we make them. If we, the public, are vulgar and ignoble in our tastes and thoughts and actions, their work will be vulgar and ignoble, and it cannot be otherwise. Simply preaching to artists that their work should be grand and elevating can be of no more use than telling a number of convicts that they ought to be good. We may describe the province of art with the utmost fullness, but the painter draws his inspiration from the life about him,

not from books on æsthetics; he reflects the sentiments of his time rather than the text-books.

It may be urged that the paintings of a man like Millet by no means represent with accuracy the gaudy materialism of the Second Empire, and that hence our statement falls to the ground. Yet Millet no more created the insight into the pathos of humble life which makes his pictures genuine than he created the poverty and misery which touch our hearts in his paintings. The history of literature in the last hundred years enables us to see the growth of interest in the pauper, just as in politics we see the spread of democracy, which is the expression in practical life of the same feeling. Society, we must remember, is but the resultant of all individual aims and actions; art and literature are two of the forms in which it leaves the record of its interests and enthusiasms, just as politics is its practical expression.

A study of the analogy between literature and art would be most interesting, but, if complete, it would carry us too far from our present discussion. Whatever period we might take for examination, we should find a similarity between the two; not necessarily an equality of value, but similarity of aims. Thus, at the present day, the delight of some contemporary bards in making over the past, in pretending to be Chaucer or an early Italian poet, finds its expression also in the pictures of some of the English artists. Urging them to take different views of the province of art would be to indulge in declamation. Yet the phenomenon of the neo-romanticism of the present day does not, as we all know, show that our whole society is abandoned to wailing and picturesque masquerade; it is merely a sign that a number of people possess a certain taste which the rest of us are too weak or too much divided by opposing counsels to expel. These antics are but an eddy in the great movement of art and literature, which is as indifferent to the worship of the peacock and the lily as the great mass of voters are to old brocades. Poetry is not dead, in spite of the contemporary revival of euphuism, nor is painting a lost art because some painters turn their backs on the present and pretend to be somebody else.

If not all the work done now is marred by materialism or affectation, it is because a truer inspiration survives, which shuns materialism on the one hand and mock mediævalism on the other. The best thought is generally an exception; only at rare

intervals does it express the wide-spread fervor and engrossing interest of a country, as in the flowering of Greece and in the age of Elizabeth. Then, the surplus energy and exultant self-confidence of a whole people, not being distracted by the need of action, made an outlet for themselves in artistic expression. In this country, on the other hand, the constant demand for practical work has lessened the number of those who might otherwise have devoted themselves to art and literature, and it has also diminished the strength of whatever inspiration there might be. In politics we see the same experience repeated. We may take for example the vicissitudes of what is familiarly called the Tweed Ring. The existence of a band of plunderers, although but vaguely felt, was no secret to the inhabitants of New York. Yet, for a long time they took no steps toward freeing themselves from the incubus. The costliness of the city government was as well known to them as is the expensiveness of the municipal buildings to the people of Philadelphia, or the extravagance of what is called the junketing of common councilmen to the citizens of Boston. The revolt against Tweed came only when his misrule was too costly for endurance, too gross for toleration. Then selfish instincts relaxed their hold, and in a spasm of virtue the city rid itself of its enemies. The same materialism stands in the way of art and literature, excellence in which stands for virtue in the body politic. In all, the ideal is difficult of attainment. To have addressed the people on the province of politics would have been as idle as to read aloud to a man clambering up a steep cliff extracts from Newton's "Principia" on the law of gravitation. The discussion of the province of art is apt to be equally barren. The artist will never listen to it; he will paint his pictures in accordance with the feeling of his time, or, at best, of the few who, in his estimation, represent the highest imagination and best thought of his time. What he shall paint, what the poet shall write, lies in the control of every one of us, just as the policy of our government lies in the hands of its citizens. The impotence of a single vote is depressing, but it is the accumulation of single votes that controls the nation. We are the atoms that combine to form public opinion, that by our interests and enthusiasms and opinions on practical life and abstract questions form the ideal which poets and painters set before us. They teach us by showing us what we really are. The complete picture of society is given in a nation's literature and art. If the general interest in the higher

life is languid, these two representations of thought and feeling also languish. When we lament that art and literature are dying, it is because we are sick of our own image. They must die in us before they can die in the hands of artists.

Mere sporadic interest in things of the imagination and abstract thought is not enough. It must be widespread, or, at least, of weight in some prominent class before it can be in any way effectual. It is fair to hope that the larger the constituency, the better the representation. We may see in the fate of French tragedy the best that a small, carefully chosen class could accomplish; in comparison with the Elizabethan drama, which embodied the fervor of a whole nation, it seems cold and meager. When a people desires to possess a literature because every other country has one, it gets one that is manufactured rather than inspired, as unlike the natural growth as the books bought in a lump by the *nouveau riche* are unlike those collected by a man who reads. The French epics and the early Italian tragedies are an example of work done from a sense of duty. There always seems to be a great waste in the working of natural forces, and there is an analogous loss in the scattered, uncombined zeal which animates small circles here and there and fails to inspire a healthy general sentiment.

We see the same thing illustrated in politics. The eagerness of politicians in our behalf is the measure of our attention to our civic and national duties. It is only a general enthusiasm that can establish, for instance, civil service reform in this country; and what is true of this is true of politics in general. The quality of our art, whether of architecture, sculpture, painting, music, or literature—not necessarily any particular one or all of these—is the measure of the amount and nature of our imagination.

A hasty glance at any given period will not determine all that is going on in it. The eye is readily caught by a glitter which covers nothing solid. At the present day it is not the artificial revelry of the poets that expresses the feelings of the people; these possibly come nearer to finding their expression in the reaction which Walt Whitman, for example, announces against prettiness of expression and neatness of rhyme. He is, to be sure, riddled with obvious faults, on which it is not necessary to dilate. He continually offends the laws of taste and every principle of literary sanity; yet this is inevitable. It is hard to contradict impressively and yet with grace; and what

this writer does is to contradict the whole method of his time, to denounce current mannerism, and to put in its place absolute frankness. Every man who has sufficient enthusiasm to found a new method pays for it by the loss of wise judgment. The tilt that is given by extreme fervor alone inspires action; an absolutely sane man would doubtless remain forever in a condition of stable equilibrium; he would see so clearly the good and bad side of everything that he would not stir a finger. A dash of fanaticism, whether it incline us to charity, to art, to literature, or to self-indulgence, purchases accomplishment in one direction at the cost of failure in another. In short, fallible man has the faults of his qualities. Then, too, the leader in a new movement is unable to perceive clearly the best way in which a reform is to be made. He sees no errors that others have committed, which might serve as warnings; he makes all the mistakes for himself; but if he has the divine spark his method will live and grow clearer with the sincere work of every follower, until it gives way in its turn before some new development of thought.

Every change begins awkwardly, for nothing but practice can secure smoothness. English tragedy could not have been foreseen in *Gorboduc*, and it would have been hard to detect the full efflorescence of modern sentiment in Lillo's *George Barnwell*. Then, too, even reformers are hampered by their education. Zola, for example, detests romanticism, but it is easy to see in many of his novels that he, too, breathed the air of his time when he was young, and that he bears the mark of his early faith as truly as the ex-priest can hardly fail to show that he was once in orders.

In Walt Whitman and Zola we may see how literature is drawing its inspiration from some of the leading influences of the time, and notably from the general progress of mankind toward democracy. For more than a century society has been at work destroying the conventions which were raised with infinite pains, and literary conventions have felt the revolutionary spirit. The province of art has been changing with the varying tastes of men, so that while its past limitations may be defined, its possible growth in the future is not necessarily to be according to generally accepted rules. The rise of science is destructive to conventions. Freedom is the very breath of science, and the general free movement of boundless human curiosity cannot fail to affect literature. The movement toward realism is one instance of this. The precision of thought which science en-

courages cannot fail to become a habit which shall show itself in purely literary work. For an example, the destruction of the theory of special creation must affect literature by requiring that writers should shun incoherence, and should look upon the mere accumulation of psychological impossibilities, however impressive, as no better than the introduction of a ghost into a sleeping-car.

Certain lovers of letters are alarmed at the advance of science and seem to fear that, unless extraordinary precautions are taken, the imagination will expire like the Ptolemaic system of astronomy. Mr. Matthew Arnold takes up the cause of literature with some warmth in a recent number of an English magazine, and it is certainly an interesting sign of the times that we find belles-lettres on the defensive. It is a very ingenious defense that Mr. Arnold makes. His ridicule is effective, as ridicule generally is when used against new notions, and it is easy to imagine the smile that must have lit up the faces of his audience—for the article consists of a lecture—when, more than once, he mentioned the “hairy quadruped furnished with a tail and pointed ears, probably arboreal in his habits.”

Still, it is possible to conceive of a time when the division between literature and science shall be less sharply drawn than it is at present. Now they are looked upon as two hostile camps, and skirmishing is warm at the outposts. Yet there may be peace in the future when the man of letters shall cease to amuse himself and others with picturing the man of science as an arrogant person whose sole occupation is pouring some unsavory decoction from one glass tube into another, and when the scientific man shall no more imagine the man of letters to be a somewhat contemptuous person who prefers alliterations to more solid good. After all, what surprises people who have ceased to quarrel is the extent to which they agree, and when we consider that every one of us is the product of both scientific and literary training, we are conscious of no vast dissensions within ourselves. Possibly society may tolerate both literature and science.

The point now discussed is the prominence to be given to science in education, and Mr. Arnold derides those who maintain that the students who choose literature and history, do less well than those who study science. He illustrates the folly of his opponents by mentioning a member of Parliament who wrote a book about this country, which contained a good deal of valu-

able information about geology, and closed with the suggestion that we import an English prince and establish a constitutional monarchy. "Surely, in this case, the president of the section for Mechanical Science would himself hardly say that our member of Parliament, by concentrating himself upon geology and mining and so on, and not attending to literature and history, had 'chosen the more useful alternative.'" The question can hardly be regarded as settled by this error of a scientific observer. Students of literature and history have been known to make quite as gross mistakes as this one of the unliterary member of Parliament. It is scarcely ingenuous to father on science blunders that are as old as history, and which might easily be met by the *tu quoque* argument. How exact is Mr. Arnold's article on America?

When the classical system of education was established, about four hundred years ago, it covered the whole field of the learning of the time. It survives now, when nearly every other institution of that time has yielded to the growth of the modern spirit. Ecclesiasticism has bowed to the change; government has thrown half of its power to the governed; the faint glimmerings of science in those days are lost from sight in the splendor of what the world now knows by that name; and yet herds of schoolboys are filled with a distaste for letters because the languages of Greece and Rome are still employed as counters for the acquisition of prizes.

There are two things which tend to correct the narrowness of an exclusively classical education. One is the fact that worldly success requires a wider preparation than was demanded four centuries ago. Society, in this country at least, is learning to look upon devotion to the classics as a luxury, not as a necessity, and the colleges are meeting this new opposition, enlarging their curriculum. The classics are no longer the key to all knowledge, and it is idle of us to pretend that we think that they are. Secondly, and apart from this material reason, the recent growth of science which, through a thousand channels, is modifying the thought of society on every subject, demands a place in modern education. Certainly, colleges should be the leaders of thought if they wish to retain the influence they once had. It is not to be desired that students who have received what, by common consent, is called the best education of their time, should not be equipped for the position they are expected to take in the world. We do not wish our colleges to be vats of an-

tiquated opinion, in which students shall soak for four years and come out to find themselves compelled to unlearn faulty methods, to avoid being defenders of an obsolete past.

To say nothing of what the theory of evolution has done for the natural sciences, it has made over the history of human actions and of every form of human thought. It has shown us in what way literature, for example, grows in accordance with perceptible laws ; it enables us to get a better vision of antiquity ; it is, in short, like every great step in thought, a simplification of knowledge, and, like every great step in thought, it is met by sniffs and sneers.

The raw fact that a burning wax candle is converted into carbonic acid and water is but a scrap of education, or rather of information ; but the comprehension of the processes of evolution, be it in language, history, or butterflies, gives one a key which he can apply with advantage to any accumulation of learning. After all, the great aim of teaching is not what to think, but how to think, and if this is best learned in a laboratory let us send boys into the laboratory.

That science will expel literature is no more likely than that geometrical diagrams will take the place of pictures. Art and literature may languish, but they will be most certain to do this when they turn their back on the great interests of society. Science must influence them, but it will be by purging them of the melodramatic element, which can certainly be well spared. There is no danger that we shall lose our admiration of masterpieces. We are no less moved by the apparition of Hamlet's father because we know that ghosts do not appear. All that I mean is this—that such work of ours as is done in the way we ourselves think natural and right, is more likely to live than such as we do because some one else has approved of it. Despair over the probable ruin of art and letters because science is powerful, is a superfluous abandonment of hope when we look upon the magnificence of modern literature that grew up an imitation of the Roman imitation of Greek writers.

If science gives us the truth about anything, there is more hope for letters than if these concern themselves only with musty conventionalities. Science enlarges the sphere of our observation and renders this more exact. In this way it feeds and does not blight the imagination.

THOMAS SERGEANT PERRY.

SANITARY DRAINAGE.

SANITARY drainage, as we know it in America, has been a peculiarly progressive art. Forty years ago, towns were sewered to get rid of their surface and subsoil waters,—mainly to prevent the flooding or dampness of cellars, and the obstruction of traffic by the accumulations of storm-water. Agricultural lands were drained for agricultural improvement. Houses were drained for convenience. “Sanitary,” so far as common speech was concerned, was a word uncoined. Edwin Chadwick, then a middle-aged enthusiast, had barely inaugurated the movement which the world was so slow to take up, which has owed so much of its progress to his sturdy and sustained impulse, and of which, as a hale octogenarian, he is still one of the most lucid, most enterprising, and most effective promoters.

Though till then carried on with little reference to the health of the person or of the people, the drainage of houses and grounds and towns had become a somewhat systematic art. The storm-sewers of the first half of the century constituted the basis of the sanitary drainage which was to follow. The covered creeks and the subterranean waterways of London and other cities, constructed with a widely different purpose, were used for the discharge of a gradually increasing proportion of the offscourings of the population. Following Chadwick’s suggestion, the subject of separating this foul flow from the storm-water drainage, after much discussion, obtained a certain amount of practical development. It had elicited much instructive discussion, and not a little acrimonious debate, at the time when the improvement of town sewerage began to receive intelligent attention in America. The first important contribution to this branch of our municipal literature was made by Mr. Chesbrough, who, in 1858, reported to the local authorities of Chicago the results of a careful and critical study of European drainage systems, offering at the same time

a sewerage project for the apparently impracticable swamp area which had been chosen for the site of that city,— a scheme which, for the time when it was projected and the conditions by which it was limited, was a more than notable example of successful and intelligent engineering skill. The same talent applied now to the same conditions, in the light of what has since been learned, would produce a different and better plan, but hardly one so much in advance of the examples in which it originated.

The sewerage of Chicago and Mr. Chesbrough's later work at New Haven and elsewhere, have had a controlling influence on the sewerage systems of the country. Among the best examples of similar work executed by other engineers, may be cited the sewerage of Providence, of Brooklyn, and of the upper part of New York. But, after all, a review of the drainage works of all the cities of the country shows, on the whole, how limited has been the influence of any sanitary suggestion. The drainage systems of our newer towns is generally bad, and those of the older ones is even worse. Taken as a whole, the old peninsula of Boston is a quite complete museum of almost every conceivable mistake and defect in public sewerage. It has some good sewers, but an unusual proportion of very bad ones, as is shown by an illustrated report on the subject made by Eliot C. Clarke, Esq., to the Massachusetts State Board of Health. Philadelphia offers in its older and its best peopled portions much less variety of defect, but an almost universal dissemination of defects of very serious character.

Boston, Buffalo, and a few other large towns are now executing or considering the construction of great intercepting trunk-sewers to keep their foul outflow out of adjacent waters. It would have been more logical if the authorities of those cities had first secured the reconstruction of their interior sewerage systems, and so remedied faults which have a more immediate effect on the health of the people. Certainly, a logical sequence of their present efforts must be an extension to the interior of the town of the principle of purification now being applied to the water front. The influence of the example of England, where the greatest attention has been given to water-carried sewerage, has been most important. The practice of separating storm-water from foul drainage, advocated there some forty years ago, and from that time to this largely adopted, was so obviously a move in the right direction, where circumstances

favor such a system, that it has at last had marked effect in this country, where, indeed, it has received important modification and amendment. Many smaller towns, for which sewerage was recently not thought necessary, are now discussing the propriety of introducing complete works, or are actually carrying them out, advantage being taken in many cases of the greater economy and cleanliness of the separate system. Indeed, this system is being considered for portions of our larger towns in some cases, in others for whole towns. Baltimore, for example, where the existing sewerage works are confined to some dozen miles of storm-water conduits laid in the low-lying parts of the town where surface water used to accumulate, is now actively considering a project submitted by its engineer, Mr. Charles H. Latrobe, for the complete sewerage of the whole city,—over one hundred miles,—on the system of the entire separation of storm-water, as carried out in Memphis. New Orleans has adopted the same system, to be executed when, if ever, it shall be able to procure funds for the purpose.

Ordinary brick sewers, as built from immemorial time, are practically very far from being impervious to water. The original purpose of their construction has usually been to carry away storm-water flowing on the surface of streets and of private property; but one of their most beneficial offices has been found to be the incidental removal of the surplus moisture of the soil,—an effect the influence of which upon public health has always been great. So obvious, indeed, has been the advantage of such soil drainage that, where tightly jointed vitrified pipes are used in heavy soils it is usual, in the best practice, to lay porous draining-tiles in the ditch, or, in practice not so good, as in recent work at Newport, to leave the lower part of the joints of the pipes uncemented, securing in this way, when the ground is saturated, an efficient subsoil drainage. Unfortunately, this method secures also the unintended result of allowing foul sewage to spread itself throughout the soil during dry seasons, poisoning the ground and robbing the heavier part of the sewage of its requisite means of transportation, stranding it as a deposit in the pipes.

The influence of subsoil drainage on the general health of the people, and especially in removing or mitigating fever and ague in malarious regions, has been quite as marked in the case of drainage works carried out in country districts for purely

agricultural reasons. The result of such drainage in England, in districts which were formerly extremely malarious, has been most important and lasting, and it is now the accepted belief on all sides that the sovereign remedy for fever and ague is the complete drainage of all moist land in the neighborhood.

The history of house drainage during the past fifty years is the history of a most rapid and satisfactory progress, from the mere introduction of convenient channels for the removal of what would otherwise have to be carried out of the house by hand, to a process whose intimate relation to the health of the people is universally recognized. It has more recently exhibited a steady growth from the "modern conveniences" scattered throughout the house by the profuse hand of the plumber, with no regard to the effect on the atmosphere of the dwelling, to the "sanitary drainage" which is now so jealously guarded by intelligent Boards of Health, and in which convenience is made secondary to conditions of cleanliness and purity. It is safe to say that we have now the prospect of securing, at an early day, a constant regard for healthful conditions in the introduction into the houses of rich and poor of those appliances for convenient and more civilized living which the whole people is so fast coming to demand.

A review of this progress discloses a remarkable change in public sentiment. Twenty years ago the number of persons who paid the least attention to the sanitary accompaniments of modern living was altogether insignificant. Later, the influence of the pens and tongues of a few enthusiasts, and of far fewer philosophers, began to be felt, and that element of society which formerly expended its enthusiasm on phrenology and kindred "sciences" began to take up sanitary science as a more promising field for the exercise of its energies. This led to the condition which now prevails, when drainage is elevated to a position of undue prominence; when, with few exceptions, all the ills that flesh is heir to are ascribed to wet ground, foul soil, defective drains, and that great bugaboo of them all, "sewer-gas"; when defective ventilation, stove heat, furnace heat, bad food, and worse drink are allowed their little-disturbed sway, the majority of their victims being charged to the account of bad drainage. The capital of the nation is notoriously the place where "malaria" plays its wildest pranks and finds its most distinguished subjects. Its site has defects,

and its saturated soil is undoubtedly most objectionable. But in all the outcry against the malaria of Washington we hear little of the whisky, and the late hours, and the dissolute life to which, probably, a more just estimate would ascribe the greatest proportion of its morbidity and of its mortality.

These remarks are by no means intended to belittle the office of proper systems of drainage in improving the public health, but rather as a precaution against that general disappointment which must follow the demonstration of the patent fact that perfect drainage is not the only requirement of perfect living. With this limitation, too much importance can hardly be attached to the subject; nor can too much earnestness be employed in urging forward every movement which looks to the removal of filth and of undue soil-moisture.

It cannot be pretended that the conditions of sanitary perfection are known; but we may safely claim that the intelligent investigations of the past few years have led to a very important increase of our positive information on the subject. There is no doubt that some of the well-accepted theories of the present day are destined to be set aside by future investigation; but, on the whole, they constitute a very good and reliable foundation for systematic work. They contain a sufficient element of certainty to justify local Boards of Health in establishing rules and regulations, the enforcement of which, whatever their imperfections,—and it is to be remembered that such rules have to be prepared for universal application, not alone for those who desire and are willing to pay for the best work,—cannot fail to bring about a marked improvement in the condition of life of all classes of the people.

The assumed basis for the best present practice,—most of which will probably stand the test of time,—may be fairly stated as follows:

All ordinary domestic waste matters, whether offensive or inoffensive, when first produced, become to about the same degree offensive when putrefied. They also become to about the same degree dangerous, save that some may carry specific germs of disease, which are absent from others. All such matters should, therefore, be removed entirely beyond the house and beyond the limits of population before their putrefaction sets in. The objections attaching to the decomposition of these substances attach in like manner, but in less degree, to such of

their elements as adhere to the walls of the channels through which they are removed; *i. e.*, it is important not only to consider the removal of the great bulk of our filth, but also to guard against evils arising from the decomposition of the adhering particles which mark the course it has followed.

The removal of waste matters by transportation in water has such preponderating advantages over all other systems of treatment,—including the earth closet,—that it is not worth while, for general practice, seriously to consider any other than the water-carriage system. The removal of solid matters in a stream of water requires a sufficient depth in the flow to carry the solids along, and a sufficient velocity to prevent sedimentation. As these elements—depth and velocity—must always work together, the size of the channel through which the stream runs is most important. An amount of water that would fill a large pipe half an inch deep, would fill a sufficiently smaller pipe an inch deep. Ordinary fecal solids are readily transported in water an inch deep, while in water of only half that depth their buoyancy would be too much reduced, and the amount of their surface receiving the impulse of the flow would be too small for their prompt transportation; so that, unless the velocity were so great as to break down the mass, they would remain in the channel. Some of the substances reaching our drains are of too firm a consistence to be broken down by the velocity of ordinary streams, and these often form the nucleus about which fouler things gather to create accumulations. Therefore, it is important, with regard to all drains which do not run full, that their diameter be so restricted as to give the required depth to their flow. There is another consideration of equal importance which must always be kept in view: the velocity of the stream remaining the same, the depth of the flow will be in proportion to the diameter of the pipe and to the quantity flowing through it. Therefore, as the quantity supplied in ordinary house drainage is fixed, the diameter of the pipe must be so restricted that, at the velocity with which it flows,—varying according to the rate of inclination,—the given fixed volume will secure the required depth. It is not, of course, possible to maintain at all times a cleansing depth of flow in any house drain; but it is possible, by regulating the diameter of the conduit in accordance with the volume flowing at the time of greatest use, and with the rate of inclination, to make sure that at some time during the day, and

generally several times during the day, there shall be a sufficient depth of current to wash away what the straggling flow may have left behind.

In those parts of the house drainage where the conduit is filled with water, it is necessary to give, at least at frequent intervals, a sufficiently rapid movement to the whole mass to carry away whatever may have been deposited in these filled portions by slighter discharges. Practically, this observation applies mainly to the case of traps, where a bend is introduced in the course of the pipe to hold water, as a "seal" to separate the air of the outer drain from the air of such pipes as are open to the interior of the house. In this case, velocity has to be given not only to water occupying a portion of the pipe, but to its full contents, so that the diameters of traps should be, other things being equal, considerably less than the diameters of the pipes leading to them and from them.

One of the most serious difficulties met with in practical work is what is known as "siphonage," that is, the sucking out of the water of traps by the rarefaction of the air in the outer pipe, caused by the passage of liquids or air through it or across its mouth. The tendency to siphonage is greater in small traps than in large ones, the same suction being brought to bear on a smaller volume (weight) of trapping water. No satisfactory device of general application has yet been discovered by which this difficulty may be overcome with certainty and without entailing other effects equally to be feared. The present custom exacted or sanctioned by local Boards of Health is to carry a vent pipe from the upper bend of the trap to the open air, so that when the air of a pipe becomes rarefied, the balance shall be restored by admitting air through the vent pipe, leaving the water of the trap undisturbed. Theoretically, this practice has much to commend it; practically, it seems to me to have grave objections, which it will require our best endeavor to remove. Our best hope lies in the devising of some other means for securing a safe trap.

However completely we may succeed in preventing deposits in waste-pipes and drains, we cannot prevent the adhesion to their walls of more or less of the soapy, greasy, and slimy matters carried by their flow. With a perfect adjustment of diameters, and with the proper appliances for frequent flushing, such adhesions may be reduced to a minimum. However small the

quantity so adhering, it is sure to enter into decomposition, and it is well known, or, rather, it is generally believed, that the extent to which such decomposition becomes noxious or innoxious is regulated only by the degree to which fresh air is admitted to it at all times. All waste-pipes and drains must have such a connection with the outer atmosphere as shall insure a supply of oxygen for complete decomposition at all points, and a reasonably rapid dilution and removal of the gaseous products of the process.

Concerning fixtures within the house, it is to be remembered that each additional one constitutes another channel of communication between the air of the house and that of the drain. The possibility of efficient protection at these openings is, at least, so well secured, that we need not hesitate to establish such fixtures as are required for comfort and for reasonable convenience; but there remains just so much question in the matter as to justify the recommendation that a luxurious profusion of plumbing fixtures had better be avoided.

The two vital points still to be settled are: First, an absolutely effective means for maintaining the integrity of traps; and, second, such an arrangement of vessels, traps, and waste-pipes as will insure the complete discharge beyond the house walls of all matters delivered into the waste-pipes without the possibility of their being long retained in traps or elsewhere on their way. Thus far we are at sea as to the first of these requirements. Some endeavor to satisfy it by trap ventilation, and others by the use of mechanical traps, both of which methods, as now carried out, have demonstrable defects. The uncertainty here involved constitutes to-day the chief unsolved problem in the work of house drainage. It is here more than anywhere else that the most skillful and experienced judgment is required in the arrangement of plumbing work.

The water-closet has undergone a transformation since improved drainage began to attract attention in this country, which has brought it within measurable distance of practical perfection. The universal condemnation of the pan-closet by every respectable authority, if we except the Boards of Health of the larger cities,—and there are good reasons for their present inaction,—is secured. Just apprehension as to its dangers is widely disseminated and deeply implanted. Its introduction in new work must soon be prohibited, and its retention

in old work cannot last very long. The defects which are most marked in this apparatus exist in a modified degree in some other closets which still meet with favor; but the march of improvement is entirely in the direction of closets which have no moving parts, which require a very copious use of water without waste, and of which the outlet channels are free from enlargements, or recesses not subject in every part to a thorough cleansing every time they are used. The simplest of these, and in many respects one of the best, is the plain "hopper" with a bent trap below it supplied with such a volume of flushing water as to ensure complete washing. Another common fault recognized and appreciated by all authorities is the supplying of closets by valves directly connected with the house supply. The importance of the interposition of a flushing cistern is getting to be well and generally understood. On the whole, we may say that, so far as water-closets are concerned, the interests of the public are taking care of themselves in a most satisfactory manner. Economy and indifference will necessarily retain in use the great mass of improper apparatus until it shall have worn itself out; but new construction and renewal of old work will in time overcome existing difficulties.

The majority of even the best houses are now very badly drained, and are subject to the production of "sewer-gas" at many points between the outer wall of the house and the fixtures within it. Occupants are generally careless or ignorant of this fact, and the verdict of "my plumber" is still considered by the average house-owner a sufficient certificate of good sanitary condition. Large traps, clogged with accumulations of putrefying kitchen-waste, soapy compounds, fecal matter, etc., are still the rule rather than the exception. Defective pipes and more defective joints, involving often the escape of drainage drippings, or of drainage exhalations, exist very widely. Most drains still run under the cellar-floor, and such drains are almost invariably very faulty. All of these things, however, are slowly being changed, and the change is, practically, always in the right direction. In some cases where the local sewerage is very bad there is doubtless a certain amount of contamination of houses by the gases resulting from decomposition in the sewer. Few modern sewers, however, are seriously open to this charge, and proper ventilation of soil-pipes is, when accompanied with good plumbing work, a sufficient protection against danger from this

cause, when the cause exists. The important lesson to be taught is that most of our sewer-gas is home-made. Bacterial growth in sewers is a newly-mooted subject, of which the mootings is thus far the only real progress; but this is real progress.

In the sewerage of towns all will admit that great advances have been made within the period under consideration. The better works referred to on a previous page may be regarded as the models on which construction is generally planned. In execution the best plan often fails of proper carrying out, because of the not yet entirely obsolete ignorance and stupidity of the newly-elected sewerage committees of local governments, and because of the almost universal misconception of the meaning of the word "economy," coupled with a notion that public works are always most cheaply and most honestly executed when let by contract to the lowest bidder. The only economy in works of this character, especially as they are forever hidden from view, is to be sought in absolutely faithful and excellent construction with the best attainable material. The extra cost of building sewers in the best manner is not worth a moment's consideration as compared with the wastefulness and grave sanitary danger which usually attend lowest-bidder construction.

I am a firm believer in the superiority, under most circumstances, of the separate removal of house-drainage through small vitrified pipes; but I believe that large brick sewers properly arranged and constructed are—bacterial growth apart—better and safer, as they are also vastly more costly, than pipe sewers, as these are usually laid. It is true that brick-sewers leak and frequently contaminate the soil; but the ooze from their walls is of much less consequence than the direct delivery of a stream of sewage at every joint with improperly laid pipes. I believe, of course, that the system that I have carried out at Memphis and elsewhere, of using very small, tightly-jointed pipes, thoroughly washed out once or twice a day by automatic flush-tanks connected with the water supply, is as much better than other systems as it is cheaper; but I believe, nevertheless, that perfect workmanship is better, from a sanitary point of view, than a perfect plan. The demonstration of the truth of these convictions afforded by good examples of work executed in this country during the past ten years, cannot fail to have its influence on future sewer construction, and we may regard our future in this respect as well assured.

The importance of the removal of the water of saturation from the soil in and about the house, and generally in malarious districts, is becoming better and better understood, and malaria must ere long become practically obsolete in the older settled portions of the United States, as it already has in its old haunts in England.

In studying the difficult questions involved in the ultimate disposal of sewage, the public has yet to appreciate the importance of immediate removal. Of course even the freshest and most recent sewage ought not to be delivered where it can contaminate adjacent streams or bodies of water; but real contamination is very greatly in proportion to the degree to which sewage has been permitted to decompose on the way from the fixtures in the house to the outlet of the main sewer. As in the house, so in the town, complete removal before decomposition should always be the rule. When water-carried waste matters are delivered in this fresh condition, a very large proportion of their organic constituents is consumed by fishes, and the lower order of life and the decomposition of such matters as float in the well aerated upper portion of the water is complete and rapid; but the rule must, in time, prevail, that no sewage shall be delivered into stagnant waters, along shores, into harbors, or into streams, which carry it past other communities which would suffer from its ultimate decay.

GEORGE E. WARING, JR.

CRUELTY TO CHILDREN.

OUR last national Census, in 1880, showed that the number of children in the United States under sixteen years of age was over twenty millions; of whom 10,158,954 were boys, and 9,884,705 were girls. From a political standpoint, the future status of the nation will largely depend on the proper physical and intellectual training of these children, yearly increasing in number, who before long will constitute the sovereign people of the Republic. In a social and moral point of view, the well-being of society imperatively demands that the atmosphere in which they live and the treatment which they receive from those having their custody or intrusted with their care, shall be such as to insure habits of industry, temperance, honesty, and chastity. Cruelty to children produces mental and physical disease, and the prevention of such cruelty is a matter, therefore, of grave public importance.

Cruelty has been legally defined to embrace "every act, omission or neglect whereby physical pain, suffering or death is caused, or permitted;" and it is divisible into those cases which the law reaches, and those which it does not reach. Thus, for instance, among the intelligent and educated, brutality to a child is viewed with horror, and corporal punishment is something almost unknown. The pride of the parent in the offspring frequently amounts almost to idolatry. Many such parents treat their children as though they were rare exotic plants; and while the children are carefully guarded against temptations common to their age, and are clothed, fed, and educated with the utmost care, their nurture in other respects is not always wisely directed. A child of delicate, nervous constitution, with a developement of intellect beyond its years, is too often forced by over-education into a premature growth of its mental faculties to the injury of its bodily health. The

strain is not apparent at first, but as the child grows older it becomes more susceptible to the inroads of disease, and too often the very care taken to develop the intellect strikes a fatal blow at the corresponding development of the body. Again, children delicately nurtured and of a nervous temperament are unusually impressible under the behavior of their parents. Where, for instance, the harsh word checks the child's love, exhibited perhaps at an inopportune moment, an impression is made on the memory and character of the child which is not easily effaced. The idea never seems to occur to many persons that the life of childhood is a life of itself. Children live in a world of their own. They have their fancies, their peculiar likes and dislikes, their day-dreams, their fears and their hopes. Day by day, as this child-life goes on, the character is being formed and molded. Their physical condition has everything to do with their conduct, and too often what is attributed by the parent to perversity or temper, is but the precursor or symptom of physical disease. The maladies of childhood are usually ushered in by an unaccountable waywardness of temper; and a child is frequently punished for a physical irritation over which it has no control, the cause of which subsequently becomes apparent. So, too, any neglect by parents of their children's interests is keenly felt by the children themselves. The weakening of parental authority at the present day, so often complained of, will be found in many cases due to the fact that the old adage that "children should be seen and not heard," is the governing maxim, instead of that constant attention to the education, the wants and the wishes of the child, which renders the tie between it and its parents stronger than adamant, and lasting through life. The stinging reproof, too often uttered in momentary anger by the parent, and frequently undeserved because inquiry was not properly made into the facts before it was administered, and the biting, cutting sarcasm, intended to convey disapproval of conduct, will, with a child of tender susceptibilities, injure its moral and affectional nature far more than the blow which constitutes actual brutality. These are cases of cruelty which the law does not reach. Yet it wisely entrusts to the parent the care of the child in its earlier years, because in the great majority of cases the parental instincts and the natural bond of affection are the very best safe-guards for its welfare.

A very different phase of cruelty exists in the case of many

of the children of the laboring classes. Occupied the entire day in his ordinary avocation, and in providing for the needs of his family, the hard-working laboring man has but little time to bestow upon his offspring. They are usually left to their mother, who, perhaps, is called upon by the demands of an increasing family to labor herself for their sustenance. Too often they are allowed to roam at large, and to select their own associates; and experience has shown that the votaries of vice are always on the alert to lure innocent and unsuspecting children into vice and crime, before even their parents are conscious of their danger. Sad cases of this character appear in the records of our societies for the Prevention of Cruelty to Children and of our criminal courts. Girls ceasing to be children and becoming women fall into vice before they really know what vice is. Boys with originally good instincts are beguiled, through the allurements of dime novels and of blood-and-thunder dramas at cheap theaters, into the company of thieves and vagabonds; and the petty theft which soon consigns them to a reformatory institution, while it may perhaps be the occasion of checking a vicious career, stamps a brand of crime upon the character, destined in future to produce deplorable results. One of the worst evils to which children of the laboring classes are subjected is their employment at a very early age in occupations detrimental to their health, and positively injurious to their vitality and moral growth. The temptation to parents to utilize their children for the purpose of enlarging their scanty means of subsistence, regardless of the injury to the morals, the intellect, or the physical health of the child, is so strong that the latter considerations rarely enter into their thoughts. The evil in this respect is a growing one, and if allowed to continue will endanger the welfare of the community by impoverishing the material out of which the American mechanic — so justly relied on as the main-spring of the nation's wealth — is made. Factories are crowded with children of very tender years who are compelled to work at starvation wages, frequently over ten hours a day, in close, confined rooms, until at last the physical system falls into premature decay, and consumption, with its attendant and kindred diseases, ensues. According to the census of 1870, the whole number of children of both sexes between the ages of ten and fifteen years pursuing "gainful" occupations was 739,164.

The last census of 1880 enlarges this number to 1,118,356—an increase of 379,192 in ten years.

Too many of our law-makers, perhaps with the best intentions, but certainly as if the strain upon the physical system were not enough, make the only condition precedent to the employment of children in factories the onerous one of requiring proof that they shall have first received a common-school education, which simply means that the intellectual strength of the child is to be taxed as well as its physical powers. How soon the adult mechanics will interfere by their representatives in the Legislatures, to prevent the employment of children in this manner, which practically results in the exclusion of adult labor from the manufacture of articles made by these factories, remains to be seen. Thousands of children yearly die from diseases contracted in these unhealthy employments. Our nation, in this respect, is far behind Europe in the protection of these helpless children. In France, as long ago as 1841, stringent laws were passed to remedy the evil. England was not slow to follow the example, and upon the English law the present French legislation is based, which absolutely precludes the employment of children in the production of dangerous and poisonous toys, drugs, explosive materials, and other articles, the manufacture of which cannot be conducted except at the peril of the life or limb of the child. You have only to go through the large hospitals in any city of this country to find a number of children suffering from mutilations of hands and fingers, resulting from their employment, at a tender age, in the management of machinery which requires thought and skill to operate; and to see how the wisdom of the French law is ignored in this country. Notable efforts have already been made in many States to reach the evil, but as yet our legislation is very crude in this respect; for, while the subject has attracted the attention of the State Boards of Health, and State Medical Boards, the local factory interests have succeeded in so weakening the measures suggested for the prevention of the evil, as to render the laws, when enacted, practically inoperative.

Equally injurious to the children of the laboring classes is their utilization by their parents in theatrical and operatic shows, acrobatic feats, and other occupations remunerative in their character, apparently harmless, and yet more deadly in their

results upon the moral and physical health of the child than any of the evils already enumerated. To the hard-working man it seems comparatively an easy thing that his little girl should sing in juvenile opera, or perform night after night upon the stage in some minor part, with apparently little effort, before an applauding audience. Indeed, many are rather proud of the prominence which they absurdly suppose is thereby given to their family, and it pleases their vanity to see their children billed as youthful prodigies and "phenomena." The admiring audience in front of the stage applaud with delight the precocious talent of the child. The press, which is largely dependent on the advertisements of theatrical agents, often criticises with severity any attempt to deprive the public of what is termed its legitimate amusement by suppressing these exhibitions. And the plea is made even by those who honestly uphold the dramatic profession, that such exhibitions are necessary for the development of true dramatic talent, and that, where the indigent circumstances of the parents apparently require it, charity ought to encourage the children in such a method of earning their livelihood. But look at the other side of the question: the very moment the curtain rises at a theater, a draft of hot air blows from the audience on the stage, frequently paralyzing temporarily the vocal chords of the actors. When the curtain falls, the cold air from the flies descends with equal rapidity, and the children, who a moment before were exposed half-naked in the performance of some act of physical exertion, are chilled to the bone before they have a chance to recover from the sudden change resulting from this alteration of the temperature. Night after night they are subjected to these changes. During the day they sleep as best they can. Their nervous systems soon become disorganized, digestion is rapidly impaired; late work necessitates late suppers, and the associations into which they are brought very soon lead to loss of modesty on the part of the girls, and early dissipation on the part of the boys. The careful student of this phase of cruelty has only to look at the results. The career of these children can be traced with painful accuracy from the time when they first perform in some juvenile operatic troupe, to their graduation in the song and dance business at a theater of lower grade than that where they originally appeared, and finally, when broken in health and enervated by dissipation and disease, to their appearance at the very lowest class

of dives and in dime museums. Hardly a case can be cited where children thus prematurely utilized for the purposes of the stage have ever risen to a high position in the histrionic art. There are some, it is true, who shine as stars in the dramatic profession, who began their stage career early in life, but these are rare exceptions.

Now, these cases of cruelty the law only partially reaches. In some instances the statute explicitly forbids the exhibition. In others it is difficult to prove specific, actual physical injury to the child, because the process of enervation is slow and the development of the seeds of disease too often insidious. Yet only recently one of the most gifted children on the stage, who played month after month as the adjunct of a well-known variety actor, died suddenly at the close of the performance, as was well stated by one of the papers which chronicled her death in a touching elegy, "in an atmosphere uncongenial to her growth." The public needs education on this subject. So long as persons of culture and refinement can derive pleasure from the performances of children, without reflecting on the injury which those performances occasion the child, there is but little hope of public sentiment being enlisted against these practices. The glare of the foot-lights constitutes a dividing line between the false view entertained by the audience and the painful results concentrated in the person of the child, and sure to ensue. Yet reflecting people would hesitate to place their own children in a position where, night after night, such a constant strain would be put upon them, and the golden rule seems to be entirely forgotten.

Let us look at this a moment. The law charges the parent with the care of the child during its minority. It does not authorize the utilization of the child at the expense of its health, merely for the purpose of putting money in the pockets of the parent. There the root of the evil lies. There the temptation is the most difficult to be resisted, and there is precisely where it is most difficult to protect the child, because of the difficulty in making the uneducated parent see that the performances are ruinous to the child. Just here the press should step in and protect the children. Unfortunately, theatrical influences to-day are too potent with the press. Too often the press sides with the audience and encourages the child, who is represented as being fond of the life it leads—as if children of tender years were competent to judge for themselves in the mat-

ter. What child does not cry for what it wants, no matter how hurtful the result may be? And who relies on the judgment of a child as of any value, even where its own interests are concerned?

Lastly, the cases of actual brutality are deserving of notice. There are those who gratify their animal instincts and passions, without regard to the consequences entailed thereby upon their offspring. Intemperance, vice, and crime are rife; and unless the children be rescued speedily from the suffering and neglect to which the vices of their parents necessarily subject them, premature disease, mental and physical, is certain to be engendered; and the statistics of crime show that the inevitable result of such treatment is to swell the criminal classes. The child of the outcast and the criminal has no home. The blow, the curse, the drunken brawl, the threat of punishment unless crime is committed, the ignoring of decency, of education, and of religion, point to but one result. Fortunately for these unhappy children, the humane of both sexes and of all classes are not lax in their efforts to reform and rescue them from their lives of sin, misery, and helplessness. The very women of society who are often reproached with being alike heartless and frivolous, respond in the most liberal manner, and devote more of their time than is dreamed of in aid of the wretched children of the poor. No appeal to a woman's heart for aid to rescue a child who is cruelly treated has yet met with a repulse. The inherent maternal instinct predominates over every other sentiment or passion; and the array of institutions in this country supported by both men and women for the rescue of the helpless, the outcast, and the lost attests the fondness of the American people for the children of the community; for in no other country are laws in such cases more stringent or more thoroughly enforced, although much legislation on the subject is yet needed. A wise experience has shown the necessity of creating societies for the prevention of cruelty to children, to enforce these laws. The duty of public officials in such matters, except in glaring cases, too often is neglected. But the records of these societies show that the humane and the intelligent, in every city and State where the organizations exist, are unswerving in their efforts to secure to little children that consideration by the community which their future so imperatively demands. Until some better mode of reaching the evil is pointed out, the work of these child-saving

societies deserves the support of every humane person. They are the dread of all who practice cruelty to children; they incur the resentment of those who are unable to control their action by political, pecuniary, or personal influences; but their work speaks for itself, and illustrates more strikingly than any other creation of the American people the crystallization of the humanity of the age in a most concise, compact, and efficacious form.

ELBRIDGE T. GERRY.

CHURCH ATTENDANCE.

A NON-CHURCH-GOER.

IT is a generally admitted fact that in these days only a small proportion, even of intelligent and eminently respectable people, are regular attendants upon religious services on Sunday. It is believed, and frequently deplored, that the proportion is diminishing year by year. The increasing aversion of people who cannot be called bad or depraved to church attendance is generally ascribed to the spread of unbelief; but this does not wholly account for it.

The world has, indeed, been moving very rapidly during the last generation, and theology, which used to be in the van of human thought, and in some measure to lead in human progress, has fallen to the rear, and is in imminent danger of being left altogether. The results of scientific and philosophic inquiry have widely diffused an intelligent common sense, which will not accept teachings that were once potent over the human mind. People do not like to be fed on the dry leaves of an antiquated theology in which the sap of life has ceased to flow. Dogmas which used to keep the superstitious mind in subjection, and rule the lives of men through their hopes and fears, have lost their power, because enlightened thought declares that there can be no such terrific chances in another life as the world used to believe.

It is useless to fight against the tendencies of the age, or to deplore them as evil, for they are in the line of human progress. Men are better and not worse than in the olden time, and yet they believe less in the supernatural and the unprovable. The majority of intelligent and well-meaning people, whose purposes are good, whose aspirations are high, whose conduct is upright, do not and cannot believe what the churches teach, and they are weary of its reiteration. In fact, the keener their apprehension,

the clearer their mental vision, the stronger their powers of thought and the broader their intellectual culture, the less willing or able are they to stoop to the yoke of belief which the church imposes. It is not the daring atheist or the reckless evil-doer that is now chiefly found in the ranks of non-attendants at church, but the sober citizen and the father of a family, who is loyal to his convictions and faithful to his duty.

Why does he not go? Why should he go? It is for the church to attract, and it repels. It proscribes thought and free inquiry. It cramps the brains of its ministers until it is only the intellectual light-weights that seek its service. The mediocrities of the seminaries go to the pulpit. They offer nothing for the mental or moral digestion and nutrition of healthy men. They minister chiefly to the superstitious, the narrow and the morbid, and the masculine sex is disappearing from among their followers.

There is no doubt that people are repelled from the pews because the pulpit is behind the age. The notion can no longer be kept up that "unbelievers" are bad. It has to be admitted that they are, as a rule, intelligent, earnest, and altogether honest. They still cherish the hope, at least, of a future life, and they certainly have no "enmity toward God." They want to lead decent and well-ordered lives, and bring their children up with good principles and high ideals. They recognize the needs of their higher nature, and have no objection to its being called a spiritual nature. They recognize the value of appeals to the purer feelings and the loftier sentiments. They know that through the eye and ear the soul may be reached and benefited. They would be glad on their weekly day of rest to subject themselves to elevating influences, and bring their families within them. Having this want, and recognizing this need, they still keep away from the "sanctuary," partly because it so inadequately provides for them. They do not find there satisfaction for the soul, and modern society, dominated by an antiquated ecclesiasticism, is failing to provide for the spiritual wants of man. It is therefore failing to arrest the working of those forces in human nature that tend to moral degeneracy. Science is to-day doing more for morals than the Church.

But, as was stated at the outset, unbelief is but one cause of non-attendance at church. There are many who would put up with a good deal of decayed theology, and try for themselves and

their children to obtain benefit and satisfaction from church-going for the sake of the sustenance of the better nature and the stimulus to the higher impulses, inadequate though they be, were they not actually repelled from the church-door by the demands made upon them if they enter. A common excuse for not going to church is the same as a common excuse for not getting married. Men of modest means and a fair share of pride and self-respect "cannot afford it." They would willingly pay in the form of pew-rent a reasonable compensation for such benefit as they could get; but having obtained their seat and paid for it, they find themselves subjected to constant solicitation for a hundred purposes that have no connection with their reasons for wishing to go to church. Perhaps the church which they wish to attend, through a policy which they had no part in making, and which they would never have approved, is involved in debt, and they are asked to help it out of foolish bankruptcy. They are asked to subscribe for foreign missions, though doubting the benefit to distant savages of the five dollars' worth of teaching which it costs a hundred dollars to give them. They are called upon to contribute to various charitable enterprises and entertainments,—not called upon simply, but persistently urged, when they have their own personal notions about charitable aid, in accordance with which they do in private what they can afford or feel disposed to do. They find that in what claims to be the temple of the meek and lowly Saviour, who gave his special blessing to the poor, and was himself more slenderly provided for than the foxes and the birds of the air, they cannot feel at home unless they are comparatively rich. The Church to-day is a beggar, not humble and meek in its demands, but greedy, persistent, almost impudent. Our seeker for sustenance and inspiration for his better nature finds himself in a congregation of daughters of the horse-leech, ever crying: "Give, give!" and he flees in weariness and disgust from their importunities.

And yet it is not his pocket alone that is sensitive. His self-respect and pride are hurt. He thought, perchance, that among the professed followers of the meek and lowly one, there might be a sort of equality of position, as among joint heirs to a common inheritance compared with which earthly resources are said to be insignificant. But he finds that the continual calls for contribution and for aid in the entertainments and charitable side-shows of the Church serve the purpose of gauging a man's

worldly means, and he is relegated to his place in the social grade of the Church according to his ability to pay for it. Perhaps his means are modest, and the private demands upon them all they will bear. In that case, he is nobody in the society of the Church. He is made to feel that he and his family are measured and estimated according to the scale of worldly treasures, and he becomes discontented and unhappy. He concludes that if the modern Christian Church is the guardian of the gateway to heaven, it is easier for a whole caravan of camels to thread the postern of a needle's eye than for a poor man to make his way through the formidable barrier. He gives up his search in that direction for elevating and encouraging influences in life's trials, and, with the conclusions of science and philosophy, makes a more comfortable, if not a better, sanctuary for himself and his in his own home. Churches, at least in large cities, are for the rich, and serve rather a social than a genuine religious purpose; chapels and mission schools are for the poor, who are thereby made to feel their inferiority; but for the great class of reading, thinking, and active men of the age there is no provision made for spiritual salvation.

A NON-CHURCH-GOER.

REV. DR. WARD.

I MUST confess to a certain embarrassment in attempting to comment on the paper of "A Non-Church-Goer," from a difficulty I find in determining whether it should be treated as a serious communication or as a sort of jest. As a serious attempt to state facts I could read it only with astonishment, for from beginning to end it assumes as well-known fact what is well known to every person of intelligence upon the subject to be the reverse of fact.

The substance of the article in review is the repetition, with variations, of the assertion that "it is a generally admitted fact that in these days only a small portion, even of intelligent and eminently respectable people, are regular attendants upon religious services on Sunday." This is palpably untrue, and yet it is reiterated again and again. "The majority," says the writer, "of intelligent and well-meaning people, whose purposes are good, whose aspirations are high, whose conduct is upright, do not and cannot believe what the churches teach, and they are

weary of its reiteration." After making this assertion, that intelligent and moral people have generally withdrawn from attendance upon our churches, the writer then proceeds to discuss reasons for his false fact.

It would have been the part of an intelligent writer to make at least superficial investigation to discover whether the facts are as imagined. One whose purpose, however, is simply to stir up the lions may not care whether his stick is tipped with fact or fancy. But the fact is easy to obtain. It is patent to the eye, and a few minutes' search in the Census Reports and in the Year Books of our religious bodies would give the desired information to any one who was not desirous to remain in ignorance of it. I suppose it is the United States that is chiefly being considered in this discussion; and it is a fact easily demonstrated that the proportion of members of so-called Evangelical Protestant churches is now considerably larger than at any previous time within the century. There is in the United States a population of fifty millions of people of all ages. Of these, over ten millions, more than one in five, are communicants in Evangelical Protestant churches. Mind, I say communicants. I do not say nominal members, adherents. I do not count in the baptized children. There are actually enrolled as communicants, who are chiefly adults, by trustworthy statistical reports, by count and not by guess-work, over ten million men and women. These represent five million families which are attendants at church, and the children of which, and many of the adults, are attendants but not communicants. We are within bounds if we say that they represent thirty millions of people who recognize themselves as attendants or adherents of the churches. Here we have at once a handsome majority of our people in this Protestant division of the believing Church. But we must add to these, according to the best computations, over six millions of Catholics. "A Non-Church-Goer" may deny that either they, or the thirty million Protestants, are "intelligent and eminently respectable people"; but he cannot claim that they "do not believe what the churches teach." That would be absurd. They do believe.

We have, then, at a moderate calculation, thirty-six of the fifty millions of our population who are recognized as regular attendants on those churches whose faith, we are told, has ceased to attract men of culture and intelligence. Of these ten millions

are active communicants of Protestant churches. And this immense number of communicants represents a rapidly increasing proportion of our population. In 1800, there were, according to the best available statistics, 365,000 Evangelical communicants in the country, being seven per cent. of the population of 5,308,483. In 1850, there were 3,529,988 such communicants, being fifteen per cent. of the population of 21,191,876. In 1870, there were 6,673,396 such communicants, being seventeen per cent. of the population of 38,588,371. In 1880, the communicants had risen to 10,065,963, being a little over twenty per cent. of the population of 50,152,866. The increase in population since 1800 has been ninefold; that in Evangelical communicants has been twenty-sevenfold, three times as great as in the population. So much for the random assertion that "only a small proportion, even of intelligent or eminently respectable people, are regular attendants upon religious services on Sunday," and "the proportion is diminishing year by year." On the contrary, the proportion is increasing so rapidly that if "A Non-Church-Goer's" life should be prolonged many decades, the greater likelihood is that he will have to hide himself away or emigrate to escape the danger of being converted.

Does our imaginative friend say that he had in mind the "intelligent and eminently respectable," and that the church-members and church-goers are of a different class? He dares say it, probably, for he gives no evidence of measuring his words; but it would be palpably untrue. It does not need proof that the classes which are eminently non-intelligent or non-respectable are, like our friend, almost to a man, non-church-goers. When a previously vicious man attaches himself to a church, it is a step toward respectability. The Church educates its members in honesty and thrift. Church-members average much more moral, intelligent, and wealthy than non-church-members. This is the natural product of their church-training. Go into almost any community and you will find the "eminently respectable" people generally church-goers, if not church-members. Every village this side of Tombstone, Arizona, is full of the proof of it. If you find anywhere a community which does not go to church, you find one where life is not safe, and where Judge Lynch does the preaching. It is the saloon and groggery population which supplies the larger part of non-church-goers.

But do not intelligent men keep away from the church? Yes, some of them, but not many. The vast majority of really intelligent people are adherents of the church. Some are not, but they are comparatively few. There are men of French or Spanish birth who have learned to despise Romanism, and who, in throwing it off, have thrown off all faith. There are Germans by birth who have succumbed to a local tide of unbelief. There are Jews to whom Judaism seems a decayed religion, and who have accepted no other. There are physicians who have learned that brain activity and mind activity are correlate, and who conclude it is all brain and no soul. There are students of nature who see majestic, immutable laws, and are satisfied that the law of the vibrant atom and the developing molecule is God enough. There are brave and good men who have thought out, or thought along the accretions of accepted creeds, and suppose they must reject the creeds no less than the accretions. There are thousands of such, and they have their own coteries in our cities where they chiefly abound, and they are numerous in the aggregate; but they are yet a small fraction compared with the great body of our intelligent and moral people who still are attached, and in increasing ratio, to our churches.

I speak of the United States, not to avoid the mention of Darwin and Huxley and Tyndall, but because it is by this country that we must judge the truth of the assertion made. I am not afraid to speak of Germany, with its Emperor William and its Prince Bismarck, stout believers, and its scholars less unbelieving and its churches less recreant to faith than fifty years ago; of France, less atheistic than at the beginning of the century, and with a rapidly growing Protestant strength, with its successive ministries so strongly Protestant; of England, notwithstanding that majestic name of Charles Darwin, and those other honored names I have mentioned, but which can be easily matched in science with three times as many names of scholars of nature and of humane learning who cherish the Church of Christ; the England whose prime minister is "fed on the dry leaves of an antiquated theology in which the sap of life has ceased to flow," but who, somehow, is the robustest man in the British empire; the England whose Darwins and Tyndalls, even, christen their children in the old churches. I might speak of these, but I wish only to deny the strange assertion that the religion of Jesus Christ, and the churches which embody it, have ceased to keep their hold on our intelligent and moral public.

Does "A Non-Church-Goer" wish to tally names? Who stand at the head of our departments and schools of science? Who are they in geology? Go down the list, from Dana and LeConte, and see whether they are church-goers or not. In biology, begin with Gray, the stoutest Darwinian of them all, but a devout member of an orthodox church; in astronomy, with Young and Newcomb; go through all the sciences and count their devotees, and I am not afraid to let the tally tell whether the Christian faith has been rejected. Who are the friends of education? Who scatter their money over our land to sow it with colleges? It is Christian men, almost exclusively Christian men, who do it in the interest of the Christianity which they love. Who have sent teachers to our freedmen and our Indians, and are giving them common schools and universities to pay the debt we owe them and to make them intelligent citizens? Who else is it that loves intelligence and morality enough to do this but Christian believers? When a body of people who have repudiated the Church do the same, we are surprised, and fill the air with plaudits. Mr. Adler's Society for Ethical Culture, with all its strength of wealthy Hebrew and Gentile unbelief, has established a kindergarten or two for the poor in this city, and we praise it loudly. It is well done. But Sarah B. Cooper and her San Francisco Bible-class have established five times as many—and what of it?

The Church exhausted? The sanctuaries empty? Who does not go to church? Take any village and reckon from house to house of the reputable inhabitants, and they nearly all go to church. Watch the front doors of Fifth avenue, and see what one fails to open at half-past ten Sunday morning to send its dwellers to church. The world of society, of culture, of wealth goes to church. "Where do you go to church?" is one of the first questions asked of new acquaintances, because all go to church somewhere. Ours is a church-going people, a church-respecting, a church-honoring people, and never more so than now.

Here I might stop. If the assumption is wrong, the explanations given are not worth considering. The two given are as false as the assumption that our churches have ceased to attract. One is that our intelligent people have ceased to believe the dogmas of the Church. It must be met with a simple denial. The other is as amusing as it is amazing. It is that churches make such enormous pecuniary demands on people that they cannot

afford to go. Seeing that church privileges for a family cost, on an average, in our city churches, less than one moderate smoker's cigars, the weight of this objection can be judged. I should have thought a certain shame would have prevented its being offered. I can assure "A Non-Church-Goer" that church-goers love to give money for what they think will promote education, morality, and religion, and that with them it increases the popularity of a pastor if he is very faithful in urging them to open their pocket-books for benevolence. I must also tell him that I was inclined to regard him as having written not in earnest, and as having attempted only to gather into shape the wildest current prejudices, largely because he gives utterance to this objection to the Church, and because, in doing it, he repeats the quip that it costs a hundred dollars to get five dollars to the heathen. If he had said this deliberately, with intention to be believed, he would have been guilty of slander. The statement is a falsehood, unredeemed by a shadow of evidence. Our missionary societies publish full financial reports; anybody can read them; they are managed by careful business men, and as economically as any other enterprises; and only a small and reasonable percentage is spent for management, a smaller percentage than is spent by our life insurance companies, which do their business at home.

Our non-church-going population, like our church-going, may be divided into its two classes—those who think and those who do not think. Of the latter, the vast majority have inherited or absorbed a general belief in Christianity. They do not go to church simply because the churches have not yet got hold of them. The progress of the churches is reaching them, and will gradually get them. But the thinking non-church-goers are, to a great extent, unapproachable, because they are unbelievers. For their unbelief, however, the churches are, to some considerable extent, responsible. A very great part of them do not believe because believers make Christianity incredible to them by their unconscionable demands on their credulity. Tell a man that he must give up the results of his studies of geology and biology, or give up the Bible, and he will give up the latter, unless he has the sense to know that these dilemma-swingers speak without authority, and are the Church's silly people. If the Church could kill off its *mallei hæreticorum*, there would be far fewer heretics to be hammered.

But I cannot pause to develop this attractive subject, and to do so would be a concession to "A Non-Church-Goer." What these slaves of tradition say is not what the Church says. The Church is founded not on their traditions, but on Christ Jesus; and the world is accepting Christ Jesus as Master as never before in its history. The churches are full of enthusiasm and zeal. The work of converting the world goes on rapidly. The islands are already evangelized. We have just welcomed Christian Madagascar to our sisterhood of nations. In each successive decade India doubles its Protestant population. Christian nations ruled two hundred millions of people at the beginning of the century. Now they rule six hundred and eighty-five millions. Whether by conversion, colonization, or conquest, the world is rapidly becoming Christian. This is the greatest age for the spread of our faith since the first century. And in the face of all this, with the marvelous enlargement of nominal Christianity all over the globe staring him in the face, and the rapid increase in church communicants under his very nose, our "Non-Church-Goer" shuts his eyes (and his purse) that he may open his mouth and babble about an "antiquated theology," and a Church which "has ceased to attract," and "the majority of intelligent and well-meaning people" who "are weary of the reiteration" of the Church's faith!

WILLIAM HAYES WARD.

REV. DR. PULLMAN.

CHURCH-GOING in the United States is not diminishing, it is increasing—in what ratio to the increase of population can only, at present, be a matter of estimate. The public religious services of the Church have never been so numerous attended as now, nor by so large a proportion of intelligent and responsible people. And the most striking religious phenomenon of the age—the rise of the children's church—makes it certain that religious instruction and worship are more universal among us than ever before. The local exceptions to this statement are dependent on local causes.

That numbers of decent and intelligent people are non-church-goers, is not denied; but if the fact is more frequently deplored than formerly, it is because their position is more clearly seen to be anomalous and deplorable. The Church is

more keenly alive to its own function, and perhaps to their merits, than ever before; and makes no secret of its strong desire to bring them into the many-mansioned house of worship, love and duty. For this purpose it is ready to make—and, in its splendid Protestant variety, it does make—many adaptations of itself to differences of means, belief, intelligence, and culture; but it can make no concession of the foundation on which its temple stands, and by virtue of which alone it has the right to be. Possibly a slight concession from the other side—some modification of the truculent spirit and the rasping tongue—would make matters easier. It is not conducive to amiable feeling to have the fault-finding non-church-goer call out, in effect: “I am out of your dilapidated and beggarly old ark; and I can stay out, too, for I don’t believe there’s going to be much of a shower; but if you will let me a pew cheap, and stop preaching things that I don’t believe, and not ask me to do or to give anything more, I will come in.” This is about what Walt Whitman wanted—a place in which to “loaf, and invite his soul.” The position is an untenable one. A church made up of such constituents could have no church-value. The idea of paying your money at the door, without further responsibility, except to be amused or edified, as the case may be, is not the church idea. It is the theater notion; and it only needs the liberty to applaud and hiss in the church to make the resemblance complete. All the malcontents in the Cave of Adullam cannot rear and maintain a church on this idea. The experiment has been tried, by men of exceptional furnishing for the task, and its futility has been demonstrated by recent conspicuous failures.

The position of the self-justifying church-absentee is even less tenable now than formerly. For not only has the Church, in many of its branches, placed itself fully abreast of all the demonstrable progress of the age, but its value to the social organism is more apparent. And the fact stands clearly out, that, with all its imperfections on its head,—its defects of administration, excess of conservatism, and occasional illegitimacy of method,—the Church is the chief bulwark of the social order, the generating center of moral force, the educator, comforter, and inspirer of man, the ladder by which he climbs out of the abyss.

It is quite as idle to consider what humanity might or would be without it, as to inquire whether, in a case of decapitation,

the head or the body would lose or suffer most. The Church is altogether indispensable to human welfare. And in these brave, bright days of hope and progress, made brave and bright by deeper faith, higher morals, and larger achievement than have ever before blessed mankind, every one who is at all conscious of duty, need, aspiration, or who possesses intelligence, wit, worth, or other power, ought to be in the Church either as penitent, learner, helper, teacher, worshiper, reformer, each or all. Every one who has a stake, small or great, in the social order, is bound to contribute to the cost and sacrifice by which that order is maintained. Organized society, at its best, is but a thin crust over a seething ocean of evil and destructive passions, which continually threaten to break through and destroy. The attempt to keep these formidable passions in check by brute force has always ended in catastrophe. The only method by which society can protect, advance, and bless itself, is the method of conversion,—changing evil into good, its enemies into friends,—and this is the method of Christianity and its church, pursued to-day with tireless energy and sacrifice, under better methods, and with better results than ever before.

Law and government, the ostensible guardians of order, fall into ineptitude unless continually supported and controlled by a sound and vigorous public conscience; and to this conscience the Church is chief tutor. Let it be noted that the amazing intellectual activity of this age, with its unsparing criticism and bewildering conflict of opinion, is not a school of morals. Intellectual vigor can coëxist with moral paralysis. Educated men lie, and thinking men steal, by whatever ingenious periphrasis their skill may disguise their act. Conscienceless intellectual power is only splendid deformity. And the men of this make-up constitute our really “dangerous class” to-day.

It is conspicuously untrue to say that science is doing more for morals than the Church. Science may apply its method to ethics with some valuable results, but it can never supply the adequate moral motive. It is not too soon to claim true science as an ally of religion; but it is also important to note that the pseudo-science of pretentious doctrinaires has done much to confuse and unmoralize the age. That moral character which is the safeguard of society is only formed by the special and methodical training of the individual will.

Now, ignorance, vice, and violence, craft, greed, and fraud

are the ever-active enemies of society. And the non-voter and the non-church-goer are their allies, the "dead-wood" of the social order. The one makes bad government possible; the other renders moral anarchy not impossible. Both are unfaithful to duty, and virtually claim to be a privileged class,—the gentlemen-pensioners of society. That among the shirkers who cumber the ground of an active and hopeful era, there are men of intelligence and respectability, is admitted. Some of them stand aloof because they profoundly distrust all accepted methods, and have no faith in the proffered substitutes. They seem, to themselves, to stand

"Between two worlds,
One dead; the other powerless to be born."

It is this condition, the last result of an over-driven critical faculty, that makes them

"On the battle-ground of heaven and hell stand palsied."

But this partial excuse does not cover the case of a man who openly justifies his withdrawal from a great interest and institution of society and life, by a pretext which, under analysis, amounts to this: "I have too much brain and too little money to go to church; therefore, I stand aloof." He uses and enjoys the privileges and security of society without contributing to the cost and effort by which they are maintained. Who support the Church? Men and women who greatly care for human welfare. Do they owe the captious and fastidious non-church-goer a Church from which has been eliminated all the beliefs that give it value to them?

A man may call the Church a beggar, and the State a beggar, because they both ask money and service from him; but I know of no more impudent beggary than that which is content to owe its moral welfare and social security to institutions which it freely condemns, but will neither support nor reform. Such men are spendthrifts of the moral capital accumulated by a dutiful and God-reverencing ancestry. And the climax of this kind of thing is reached in the complaint that no provision is made for the spiritual salvation of the great class of reading, thinking, and active men. The fact is that the most of these men are in the Church to-day, deeply interested in its welfare, and trying, at least, to

work out their salvation in some worthy fashion. Are we to understand that those remaining outside are the supersecular elect, awaiting the revelation of some new principle of spiritual salvation more suitable to their superior position? Alas! in sober truth, brother literate non-church-goer, you shall find no other road to salvation than that which has been trodden by obedient feet in all the times of man. Righteousness is salvation. To perceive and obey the eternal laws, the moral order of the universe where you are at school,—this is the task to which you are set, along with your illiterate and humble brother, from whom you are differenced only by your larger responsibility. Righteousness is salvation; and unrighteousness, though it be reading, thinking, active, and covered foot-thick with culture, is damnation!

It is freely admitted that some of the criticism directed toward the church-dogmas and practices is keen, sound, well-placed, and thoroughly deserved. Much of it, and much of the strongest of it, is from within. "Faithful are the wounds of a friend." The Church is not Christianity, but an instrument for the administration of Christianity; and we very well understand that "we have this treasure in earthen vessels." But much of the outside criticism comes from pure ignorance of the forces actually operating in the Church. Some critics assume a decline of power, for no other apparent reason than to have the pleasure of explaining it. They say society is getting worse, and the Church is failing to arrest the degeneracy. They forebode evil, see rocks ahead, and raise the doleful cry of Cassandra; but the maggot that troubles them is in their own brain. Some minds are dazed over the magnitude and intricacy of modern civilization. But bewilderment is not likely to be clear-sighted. The man who feels safe in a row-boat, would, when transported to the deck of the great iron steamer in mid-ocean, be agitated by strange alarms. Mighty and mysterious forces are throbbing around him; he does not comprehend them; he distrusts, and apprehends disaster. Yet is the great steam-ship safer than the row-boat, carries more, and carries better, moves faster, and, with a firmer precision guides its huge bulk across the vast sea-mountains to its appointed haven. Danger, indeed, there always is, but it is danger better guarded against.

We hear talk of the decay of faith. There is no decay of faith—there is a change for the better in its objects. Nowhere in

history will you find an age of faith, if this is not one. Timid souls idealize the past, long for the old days, and hug the old ways; but the new are better. Men speak of the decline of religion; but there is no decline of religion. There is a change in theological belief; but that is in the interest of religion. We are to have fewer formulated beliefs, but we are to believe them, with perfect conviction, through and through. There is a rising of other potencies by the side of religion, but they will only relieve it of its usurped functions, leave it free for its appointed work, and become its firm allies. Within the Christian Church to-day, the Augustinian theology is undergoing extensive alterations and improvements, not in deference to outside clamor, but in obedience to that law of progressive self-development which has kept the vast and beneficent organization of the Church flourishing in undiminished potency through so many secular changes. The Church is strengthened, not weakened, by such changes. The Holy Ghost is not a spent force, although

“The old order changeth, yielding place to new;
And God fulfils Himself in many ways,
Lest one good custom should corrupt the world.”

Pending these theological reforms within the house, sundry brethren are camping out under temporary shelter-tents, called theism, agnosticism, and the like; while certain others, mistaking the busy sounds of renovation for the tumult of destruction, are shifting as best they can “in the open,” awaiting the final downfall of the church, after which they think likely they may take a hand in the edifying of a better one. But the great storm that is to complete the destruction does not come; and on the part of those who have suspended their religious operations to wait for it, there can now be detected a kind of Wigginesque disappointment, so to speak, and a growing disposition to build the tomb of the prophets who have misled them.

The truth is, the wave of doubt and negation, generated by the sudden and vast increase of our knowledge of second causes, which hid from bedazzled eyes for the moment the great first Cause—this wave has spent its force without institutionalizing itself outside the Church. It has washed away much superstition; it has greatly accelerated the change of theological sentiment within the Church. And it has left the real lights of science and philosophy in such a mood of intelligent common

sense that, were a crisis to declare itself, in which the only issue was "the Church or no Church," they would rally to the defense of the Church at any cost, and against all enemies. It is probable that most of the non-church-goers would do the same; and the really deplorable thing in the present situation is, that they do not, without waiting for a crisis, at once abandon their untenable position, come into the church, and use their intelligence, respectability, and whatever other power they have, where it belongs and can be made effective. For it ought not to escape their intelligent attention, that the Church is really in the hands of the laity. The great Reformation gave the world that boon, and set in motion the forces that will destroy forever the hateful dominance of the priestly hierarchy. In our reformed churches, men of intelligence, character, and convictions readily become influential, and can shape church methods to the needs of these better times. Not that they can successfully meddle with that pure gold of truth which has on it the divine stamp. "Anybody," said the smart and confident student to Dr. Wayland, "can make such proverbs as those of Solomon." "Sit down and make a few!" blandly responds the doctor. There are possibly some things in the Church which even an intelligent and eminently respectable non-church-goer could hardly better. But the laity can put a stop to the "war-whoop" style of preaching. They can abolish all unworthy and beggarly "side-shows." They can change the aspect of the "money-test" concerning which they are so sensitive. In fact, however, such reforms as these, where they were needed, have already been largely accomplished. There is plenty of preaching that is equal to the highest intellectual demands. In mind, scholarship, variety of culture and accomplishment, and in intelligent interest in human affairs outside the dogma, the Christian ministry has never stood so high as now. The superseding of the priestly by the manhood function of the ministry has greatly increased its influence and value. There are few communities and few intelligent individuals who do not recognize the worth of the Christian minister to society and life.

There never was a time in the Church when character counted for so much and mere money for so little; nor when the man of moderate means could join the congregation with his family, and worship in peace and self-respect at so little relative money-cost.

REV. DR. RYLANCE.

"A Non-Church-Goer" has been a keen observer of certain "signs of the times" affecting the organized religions of the day, and tells his conclusions to the world in a vigorous style. He never condescends to nice qualifications; sees no merit in the subjects of his criticism; seems not to have the slightest suspicion that anything worth hearing can be said on "the other side." But that sort of temper is apt to carry a man beyond the bounds of discretion, in dealing with questions that touch his antipathies, the judgment being biased by angry feeling. We have evidence of some such disturbing influence having been at work in the mind of "A Non-Church-Goer" in his severe castigation of the religious societies about us. His hatred of the deficiencies and follies he sees in those societies has blunted his power of discrimination, men and things being condemned wholesale, so to speak. He starts timely and serious questions for our consideration, but there is little of the judicial temper shown in his discussion of them. Sometimes they are handled in a way that, to many fair and liberal minded men, will appear offensive, I suspect. In such estimate we may fairly hold, I think, his somewhat contemptuous "fling" at the clergy as a class, as being made up of "intellectual light-weights,"—only "the mediocrities of the seminaries" betaking themselves to the pulpit as a calling. So, too, may we esteem his unqualified charge, that the Christian Church "proscribes thought and free inquiry," and that it "cramps the brains of its ministers"; "the superstitious, the narrow, and the morbid" almost wholly composing its congregations to-day, from which "the masculine sex" is rapidly "disappearing." This implies, by the way, a very humiliating reflection upon women.

Now these things are not only in bad taste, but, to a large extent, they are untrue. All professions have weak representatives in their service, the Church having its full share, no doubt; but to speak in a scornful way of the intellectual ability, the learning, the general culture, the liberality, and the broad, pliant sympathy of men in the clerical profession that one could name by the score or by the hundred, is to betray an extraordinary amount of ignorance, or a serious lack of moral honesty. But "A Non-Church-Goer," on second thought, I am sure, would not so speak.

Simply remarking that an exaggerated importance is attached

to the financial impediments alleged to lie in the way of the men who would, but who do not, go to church, I pass to the consideration of matters of serious importance: for there is so much of pith and point in the contribution of "A Non-Church-Goer," and so pertinent are many of his animadversions on existing conditions and tendencies in the religious world, that we can well afford to overlook indiscretions into which his impetuosity has led him.

Some of the things he emphasizes and complains of it were well worth while for the churches of our time to take heed to. It is high time that their rulers should cease to assume that men and women outside their "folds" are "totally depraved"; or that a defective creed necessarily means an immoral life; or that eternal damnation inevitably follows from refusing to accept all that the Church prescribes as essential to salvation. Let preachers have done with casting discredit upon "mere morality"; let them frankly and at once give up all of what tradition has handed down to us that a sober criticism has proved to be incredible; and let the "fundamentals" of belief be reduced to a minimum, leaving "ample room and verge enough" for inquiring minds to play freely round all matters of "uncertain obligation." Touching these things, I heartily sympathize with the feeling of "A Non-Church-Goer," the fact being obvious to an honest discernment that there is a vast amount of fine intelligence and of moral worth in the world which acknowledges no allegiance to ecclesiastical authorities, and for which the Church must provide some fitter doom than the "final fire."

I accept, also, the leading assumption of "A Non-Church-Goer" as in the main sound; for it is notorious that a very considerable number of men in Christian countries are to-day indifferent to the claims and calls of the Church, and it may be—though this I am inclined to doubt—that the number is rapidly increasing. I care not to go to statistics or to census tables for proof or disproof of the assumption. Every Christian pastor knows, to his sorrow, the reluctance of men to submit themselves to any sort of ecclesiastical yoke. Fathers and sons are often absent from church, when mothers and daughters are there. Or if now and then present, from motives of expediency, men very often stand aloof from the real worship and work of the Church, or they look on with a sort of distant

respect; many of those who thus far conform to Church usages having very little faith, there is reason to fear, in what is ordinarily said and done in our synagogues. Thus the case, as it presents itself to me, though not as bad as our critic represents it, is still very bad. There is, no doubt, a great deal in the world about us to-day to lend countenance to the cant one hears about religion being an affair for women and children only.

This indifference to Church claims exhibited by "the masculine sex" has doubtless resulted, in part from conditions and causes alleged by "A Non-Church-Goer." Men are unquestionably less dependent to-day upon the clergy for moral teaching and guidance than they once were, while they hold many of the dogmas of theology, once generally and fervently believed in, to be nothing better than ingenious refinements or conceits. And this being the just mental attitude of many men toward things that the Church is supposed to indorse, it is not strange, considering how little sound logic there is in the world, that all that the Church insists upon is by some supposed to be just as unreliable; and hence blank infidelity.

But there are other things that repel men from the portals of the Church, or which make church-going a weariness sometimes to men who nevertheless will go. The best that can be said of "the service," as a whole, often is that it is a capital discipline for patience. There is such an absence of evidence, at times, of any well-defined purpose having brought a congregation together, that a suspicion of the unreality of the whole business will now and then steal over a thoughtful on-looker. Then there is the dreary, mechanical reading of the Scriptures that one occasionally still encounters, with such a want of fitness often in the selections read to the conditions and actual needs of men to-day. Then the preaching is too often about men, or issues that are no longer of importance in the world's regard, the preacher waxing warm in defense of some fiction of theology or other, or trying to interest his hearers in some barren bit of ecclesiasticism. These things are hard to bear by men of intelligence who go to church, while they doubtless deter some men from going. In simple fairness it should be said, however, I think, that such afflictions are but seldom encountered to-day; for our preachers, as a class, it may be justly claimed, are not only sincere and earnest, but discerning and intellectually alert.

The things just enumerated, then, make up, in my judgment, a substantial installment toward an answer to the question, why so many men stand aloof from the Church to-day, or show it only a formal respect. But there are items of importance still to be added—items which I find in “the tendencies of the age.” Against these tendencies “it is useless to fight,” however, says our “Non-Church-Goer,” assuming that they are always and invariably good; whereas, to me, some of the most dominant of them seem to be desperately bad. Of one thing experience makes us well aware, of the fact, namely, that there are powerful influences at work in life as we know it, that indispose men from thinking seriously about the things of religion, and which harden them against all its appeals and constraints. Men are absorbed, for example, in the pursuit of material interests as they never were before, making life for many a fierce and continuous contention, and so leaving little time, and less inclination in them, for the quest after “the true riches.” Then the rapid increase of wealth in the nations of Christendom has begotten sensuous tastes in multitudes, who accordingly prefer to worship in the opera-house rather than in the church. Or if the Church is to win them on one day out of seven, it must bid for their patronage by furnishing similar attractions to those that the opera supplies. Now, will not any sensible and observant man living in New York to-day, or familiar with the life of any of the great cities of Christendom, say that these things, with those before specified, have much more to do with the prevalent neglect of church claims than the discoveries of science have, or than the assaults of an iconoclastic infidelity? Many men of some Christian faith are, no doubt, seriously disturbed by these; some may have lost all confidence in the distinctive truths of Revelation, and have consistently ceased from all show of respect for the Church. But the cases are comparatively few, I suspect, either because men have so little time to look into scientific or critical objections to religious truth, or because, having looked, they find that there is nothing in the objections that discredits any essential element in that truth, and so they conclude, for awhile longer, to “lag behind the age.”

I, for one, have little fear for Christianity or for the Church, from “the march of intellect,” or from the advance of science; science, as I understand it, making no pretensions to be considered a rival of Christianity, nor having anything to offer

as a substitute for the Gospel of Jesus Christ. There is a good deal of a hazy sort of doubt abroad just now, begotten very largely by rumors of what research and criticism have done to discredit the doctrines and institutions of religion. But a great deal of the babblement one hears to-day about "progress" is really afflicting to discerning souls, science having as yet done literally nothing to unsettle a single essential article of the Christian faith or to weaken a single hope which that faith inspires. As long as the Church continues to embody and to teach that faith, even though very imperfectly, it will not cease to attract the confidence and reverence of mankind. As long as sin and misery are in the world, some other and better method of dealing with them and of healing them will be necessary than is known to the civil magistrate or to the police authorities.

To anticipate anything like a speedy collapse, therefore, of ecclesiastical organizations is, in my judgment, simply silly. Predictions of some such issue have been often let loose in the social air, but little has come of them. It is amusing to read to-day M. Comte's large concession, that his followers might occupy Christian temples as they should fall into disuse, seeing how few have "changed hands" in the interval of half a century. There is a good deal in and about the churches to provoke men of progressive views to anger; but no sensible man will contend that an institution otherwise good may be discarded, simply because it is not always worthily represented; else what ground of respect would be left for any institution or instrument of civil society? Claims that the Church may be disbanded can only be reasonably preferred when it has been shown that the work it has professed to do may be done better, or that it is actually being better done, by some other instrumentality. "A Non-Church-Goer" seems to hint in one place that such is now the fact, where he tells us that "science is to-day doing more for morality than the Church"—one of his rashly impetuous utterances. Yet even he feels the need of a ministry for his "higher nature," which need science does not meet, we must infer. Where else, then, will he look for it? What school or society of men, other than the Christian Church, makes any sort of pretension of supplying the need? None that I know. While, touching interests of a more tangible sort, it may be claimed for the Christian Church, I believe, in spite of all its defects and failures,

that its disappearance would prove to be a widely-felt disaster. It inspires gentle and humane feelings into men, women, and children as no other institution or agency even pretends to have the capacity of doing; it preaches, and to a large extent practically applies, the doctrine of human brotherhood, urging persistently the duty of mutual helpfulness; it prescribes a wholesome discipline for individual and collective life; educates men in practical virtues; and begets an enthusiasm for goodness in multitudes of men and women which makes itself felt in the outlying world. The Church is even charged with intemperance in the vastness and the costliness of the enterprises she undertakes in behalf of degraded tribes of mankind abroad, and in the manifold provision she makes for the ignorant and helpless at home. Her theologies in parts may be "antiquated,"—"dry leaves,"—but her religion has been, and is, a thing of life and power.

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NORTH AMERICAN REVIEW.

No. CCCXXI.

AUGUST, 1883.

MORAL INSTRUCTION IN THE PUBLIC SCHOOLS.

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THE supreme need of ethical education in our public schools ought surely to need no assertion. In any rational theory of education everything should lead up to character and conduct. The individual's own development finds its completion in a noble character. The interests of society are not secured in a system which turns out brains minus a conscience. Educational authorities have always recognized character as the end of education. When Socrates had been shown a beautiful youth he wanted to know whether his soul was equally beautiful. Plato said: "I mean by education that training which is given by suitable habits to the first instincts of virtue in children." ("Laws," Book II., 653.—Jowett.) Locke declared: "It is virtue then, direct virtue, which is the head and invaluable part to be aimed at in education." ("Thoughts on Education.") Milton, in characteristically beautiful language, writes: "The end then of learning is to repair the ruins of our first parents, by regaining to know God aright, and out of that knowledge to love him, to imitate him, to be like him as we may the nearest by possessing our souls of true virtue." ("Tractate on Education.")

With Pestalozzi and Froebel character was the good supremely and passionately sought. Herbert Spencer's work on education treats of it as "Intellectual, Moral, and Physical."

The lack of proper provision for ethical education in our public schools is painfully patent.* This defect our public schools share with our private schools. The task of ethical education is so delicate and fine that the wisest may well hesitate over it. Job work here is worse than no work. Prigs and pharisees are the products turned out from poor character-

* General provisions for moral education are found in the legislation of some of the States, and in the schedules of studies and directions for teachers issued by many local Boards of Education. The Legislature of Massachusetts, in 1789, directed teachers "to impress on the minds of children and youth committed to their care and instruction, the principles of piety, justice, and a sacred regard to truth, love to their country, humanity, and universal benevolence, sobriety, industry and frugality, chastity, moderation and temperance, and those other virtues which are the ornament of human society and the bases upon which a republican institution is founded." Philadelphia enumerates "morals and manners," among the studies to be pursued in its schools. In the "directions to teachers," its Board of Education observes: "Remarks upon morals and manners should follow the reading of the Bible by the principal. These remarks should be made in the presence of the whole school, and as frequently as the incidents of the school may suggest." These occasional instructions are urged as a means of school discipline: "Respectfulness to superiors, obedience to parents and teachers; honesty and truthfulness thus enforced and impressed upon the mind of the pupils will be found a powerful auxiliary to the discipline of the school."

The Board of Education of New-York (1867) places "manners and morals" among the studies of the primary schools, and directs as follows for the several grades: Sixth grade—"Instruction is to be given in manners and morals, and illustrated by means of the incidents of school and home"; fifth grade—ditto; fourth grade—"Instruction for cultivating love to parents, kindness, obedience, neatness, truthfulness, and politeness, to be illustrated by examples, incidents, and anecdotes"; third grade—ditto; second grade—"Improve opportunities in the daily exercises of the schools by conversations upon the subjects of the reading lesson and all appropriate incidents to inculcate respectfulness, obedience to parents, honesty, and truthfulness"; first grade—"Instruction by means of school incidents and anecdotes, so conducted as to aid in the discipline of the school." In the schedules for the grammar schools no reference is made to the subject. The Chicago Board of Education has some admirable instructions to its teachers, worthy of a place in the directions of all School Boards. See "*Barnard's Journal of Education*," vol. xix., p. 552.

Few of our School Boards offer any detailed directions; the work is one that cannot show for itself as does other teaching; so that practically this whole subject comes to be left very much to each individual principal and teacher.

factories, and no fashion for uglinesses is likely to bring them into favor. It is so easy to spoil a soul in handling it! Still, something needs to be done, as carefully as may be. That something must be done in the people's schools. There is no other institution to which the State may safely trust this most important task. The Sunday-school is too amateurish to achieve a thorough ethical culture. An hour and a half once a week can impart but little instruction, and can secure no training. With the present pre-occupation of orthodox Sunday-schools in dogmatic and institutional religion, even their limited possibilities as ethical educators are largely wasted. Were the Sunday-school an ideal institution, as such it would still labor under the fatal defect of divorcing ethical from intellectual culture. Division of labor cannot be carried so far as to exempt our day-schools from the care of character. A child cannot be cut up into bits and jobbed-out to different specialists, and then be made up under the hands of a Master of Morals. Morality must be learned in school, as in actual life, amid secular activities. The State must assume her rightful function in the culture of character. How, then, can our present system be led on into this highest office of education?

Ethical education may be carried on in three ways: through direct instruction, through training, and through the influence of the spiritual atmosphere created in the school.

I. *Instruction.* This should be at first, not talking about virtue, but talking up virtue; not the giving of scientific knowledge concerning goodness, but the presentation of goodness in forms that will cause children to fall in love with it. Nature's order is first the concrete and then the abstract, first the example of the law and then the principle of it. The grammar of ethics should come later. Natural, unconscious action of the moral sense, responsive to the forms of beautiful goodness presented to it, makes healthier children than any elaborate studies in ethics in the best of scientific manuals. Casuistry forms good conscience-calisthenics for tougher years.

The opening exercises of the schools might include choice ethical readings, brief accounts of noble men and women, tales of brave and fine actions, golden sayings, parables and allegories of great teachers, illustrating character and conduct. There is no lack of material for such readings in righteousness. Plutarch's sketches of the grand old Greeks and Romans are full of nutri-

ment for a noble high-mindedness. Froissart's "Chronicles," and Fuller's "Worthies of England" would yield choice material for the early periods of the modern world. More modern history abounds in tales of noble manhood and womanhood. What a text-book of patriotism is the story of Garibaldi! Our own history is rich in great characters, only less conspicuous than Washington and Lincoln. Every form of personal goodness, every phase of social righteousness finds ample illustration in the recorded anecdotes of actual men and women. The daily incidents of the newspapers furnish affecting models of heroism and tragic examples of the consequences of vice. The *sagas* of the ancients abound in ethical parables, nature-myths woven into heroic legends. Kingsley's "Heroes" and Hawthorne's "Wonder-Book" are charming specimens of the ethical power of these old stories. Scenes and sketches from our great novelists, and passages from the great poets, might well form part of such readings. Between the equally irrational clamorings of the advocates and opponents of "The Bible in the School," there is no chance probably, as yet, for the still, small voice of reason. Experience may be trusted to convince men of open minds that in the world of letters there are no writings so effective in the culture of character as portions of the sacred books of the Hebrews—the people whose specialty was ethical passion—and of the Christians. Matthew Arnold has divined this, with characteristic sagacity, and, in the "Great Prophecy of Israel's Restoration," has prepared the noble poetry of the second section of Isaiah for use as a primer in schools. One of the prime benefits to follow from a rational conception of the Bible is the ability of men of different religious opinions to consider practically this question of the ethical use of the Bible-writings.

The golden words of the other great Bibles of humanity should be utilized in the same way. These righteousness-readings might pursue a systematic order, covering in the course of a school year, several times, all the great personal and social virtues, without necessarily laying bare to the children the framework of the classification. For such readings there should, of course, be prepared a rich Anthology, as a basis on which each principal could build his own selection.

Instruction could also be given, and perhaps with most effectiveness, in an indirect manner, through some of the special departments. Indirect ethical instruction insinuates itself most

readily into the mind. An oblique line is the line of greatest power in communicating this knowledge. As Emerson says: "It is the things of which we do not think, that educate us." The "readers" of the younger children might be still more entirely captured for the purposes of character-building, and be made to consist chiefly, as they do now in part, of choice passages of ethical value. History, as now studied, has little or nothing of an ethical character. Without displacing its really important instruction as to past affairs, it might be made to throw character into the foreground. American and English history afford just as fine a field for character-studies as Hebrew history, if we had the dominant desire of the ancient Jews to study character. The ethical aspects of great men and the moral bearings of great events should be kept ever in mind by a wise teacher, and would afford constant opportunities of exercising the child-conscience in a natural and interesting way.

The physical sciences are, without any conscious aim in this direction on the part of the teacher, a constant instruction in some valuable moral qualities—humility, openness of mind, love of truth and reality, patience, judgment, etc. They can be made to further the culture of character directly. The universal reign of law can be pointed out, and its double action in beneficence or maleficence, according as we intelligently understand and loyally obey it, or as we ignorantly neglect and willfully defy it. Moral laws can be shown to be grounded in nature; to be no mere arbitrary impositions of society, no illusions of the imagination, but part of "the order and constitution of things." The great ethical principles can be traced in terms of physics, in the life of the bird and beast. The bee-hive and the ant-hill can be made text-books in social ethics, parables of a true commonwealth and a real republic. That most difficult and delicate of didactic tasks, that of inducting the child-mind into pure and reverent thought concerning the sexual relations, may, perhaps, best be achieved through a poetic reading of the loves of the flowers. Thus it was, as we know from his own pen, that Froebel caught sight of the great law which runs through all life, and lifts the reproductive function into sacredness. These side-lights may reveal to the child the infinite mystery of order in which we live, and move, and have our being; and may place him in the rightful attitude of reverence toward law and of glad consent to it, which is the soul of virtue.

Instruction might also be effectively given through talks and lectures, illustrated often, by competent specialists, upon the physiological effects of common vices, such as drunkenness, gluttony, etc. The elder boys and girls could be thus taught separately, by one of their own sex, the laws of purity and their bearings on life. In these and other ways a quite sufficient amount of ethical instruction might be secured, without any radical change in the present system of our public schools. To this might possibly be added, for the advanced pupils, some systematic instruction in the nature and authority of ethical principles, and their relation to conventional morality, by some specially qualified teacher, if such instruction could be given without raising dogmatic issues.

II. *Training.* Miss Peabody once said, in happy paradox, that we "learn goodness by being good." To make children good even for awhile, to establish during a portion of each day a rule under which they shall conform to the laws of right conduct—this is the best way of causing them to learn goodness. Training is more important than instruction in ethics. Habits are the molds into which the plastic spirit is to be run, shaping it into noble character. Much is even now being done through the discipline of our public schools. The children come under a system of law which they cannot ignore, change nor defy; which rewards their obedience and punishes their disobedience. This alone, to the children of lawless homes, is an immense boon. Obedience, which Kant held to be the fundamental virtue, is rigidly enforced. Punctuality, cleanliness, and other simple virtues, are drilled into the nature. Good manners are enjoined. The effort needful to master the daily lessons is a training of the will—the central force of character. The spur of the "marking" rouses ambition, energy, "go-aheadativeness," which are at least antiseptics to the lower forms of vice. These, with the other factors of character-training, count for much.

But with these good elements there are commingled influences by no means wholesome. Self-love is a powerful motor, but a dangerous one. Nature uses it to begin her work of development, but hastens to outrank it by a nobler motor. It is doubtless needful to goad children with this spur; but a sparing use should be made of it, or we shall have men and women sensitive to no finer impulses. There is a grave danger in the reckless appeal to the selfish instincts made by the

prevalent system of ranking and rewarding pupils. Good work comes to be done not for the work's sake, nor for the sake of others, nor even for the sake of one's own improvement; but solely for the name and fame, the position and profit that it brings. We thus train the oncoming generations for the same unhappy struggle after self-advancement that is now eating into public spirit in the State, into purity in society, and into honor in the business world. In our impatience for intellectual results, we are thus sacrificing character upon the altar of knowledge. The punishments of our present system, as its rewards, are seriously faulty. They need to be made less physical and more moral, less arbitrary and more natural, less tyrannous and more just. Suspicion, espionage, and fear are demoralizing influences. "To be found out" comes to be the definition of "wrong." Scholars establish a code of school-morals,—as is well known to be the case in some schools,—and count it no wrong to cheat the master, or even to lie directly to him. Children need to be thrown, as far as possible, upon their honor; and always to be treated respectfully, until they have forfeited this right. Truthfulness and self-respect are seminal virtues, at all costs to be cherished in the young. The experience of prison reformers might give some valuable hints in the right use of punishment. The great specialists in penology have made of it a new and divine instrument in the training of character.

Perhaps the most important change to be made in the discipline of our public schools is in the introduction of higher motivities. Merit must be rewarded and faults must be punished, but rewards and punishments alike need to be lifted to a higher plane. What these higher motivities are can be better seen by a morning spent in a true kindergarten than from pages of writing. The little ones are trained there in true morality, fellow-feeling, brotherliness, justice, kindness, love. Froebel has embodied in the beautiful culture of the kindergarten the essential spirit of ethics. When the kindergarten comes to be made the basis for our public-school system, the most important years will be rescued for a wise moral training—a training which will fashion the being aright from the start, and which, we may hope, will gradually shape the school that shall rest upon it to its nobler type of character-culture.

Self-government ought certainly to be the aim to which all

moral education should look, and ought to be developed, as far as possible, in school years. As a means to this end, it might be worth while to feel along in the direction taken by certain notable experiments in education.* The great English schools have long made the Sixth Form responsible for the order of the rest of the school. The school established by the Messrs. Hill (Rowland Hill was one of the brothers) entrusted the entire charge of the order to the boys themselves. The superintendent of one of our own Houses of Refuge achieved marvels among boys, formerly "amenable only to the harshest discipline," by throwing the community gradually upon its own self-government; so that at last he did away with all watchmen, and left all cases of discipline to be decided by a jury of the boys. The schools of a republic might with especial propriety experiment carefully in this direction. The principles of ethics might be interestingly and effectively studied by the elder scholars in "courts," before which actual or supposititious cases of alleged wrong-doing could be brought for trial, the scholars acting as jury and as lawyers. Thus the child-conscience could be exercised and instructed in the rights of person and property; upon the ethics of law-abidingness, of truthfulness, of intemperance, of strikes, etc. Mr. MacMullen, who in his own school tried this experiment, tells how he found one-fifth of his boys at one time defending "prompting," "two of them very shrewdly and ingeniously," and a large number defending the rightfulness of robbing orchards. One of our private schools in New England tried successfully the experiment of a stated assembly, like the Senate or the House of Representatives of the United States; in this character the school-debates were carried on upon questions of social and political importance, familiarizing the boys' minds with the forms of our government, and interesting them in public affairs, while training them in the self-control of courteous discussion.

Public spirit might be nurtured by interesting observances upon the great national holidays: Washington's Birthday, Decoration Day, Fourth of July, etc. Societies might be formed among the children, looking to the cultivation of temperance and thrift. In some of the French schools savings societies have been introduced with marked benefit. If an afternoon were devoted

* The pamphlet prepared and issued by Mr. MacMullen, 1262 Broadway, on "Self-government in Schools."

once a week to such court and congress and society sessions, the results might be very valuable in the characters of the children.

A library of well-selected literature in each school could be made a powerful adjunct in the culture of character. Books and papers are, after all, the chief educators. And here the children pursue an elective course. To teach them to choose wisely those silent masters who are to mold their lives, is one of the best services to be rendered them. For lack of such training, they patronize the host of demoralizing teachers who await them on the news-stands, and who teach them from sensational tales and tainted novels. In nothing is a guiding hand more needed than in the friendship of books. All would never follow such guidance, and none might follow it wholly; but many could be influenced by it; and, if the coöperation of parents was secured, the present ravenous consumption of low literature might be checked, and a better taste formed. There is no safeguard against a bad taste equal to the creation of a good taste.

A workshop in each school would be another valuable annex. Our present divorce between intellectual and manual education is fruitful of moral ills. It robs the hand-worker of that interest in his labor which it could and should yield him, and of the safeguards it might throw around him in the human hunger for "more life and fuller." It unfits the mass of those who are graduated from our Common Schools for the common works of the mass of mankind, in all lands and ages; while it fails to fit them for the "genteel" pursuits to which they aspire, and in which only the superior minds can hope to succeed; and so crowds our cities with men and women for whom life is one prolonged and precarious struggle, with temptation ever yawning below them. "To dress it and to keep it"—so ran the charge of the Divine Educator to the first pupil, in the child-garden of the Eden legend. There is that in character which handicrafts alone seem to develop. Alike then for their indirect and their direct bearings on character and conduct, the introduction of manual training is of prime importance in the development of our Public School system.

III. *Atmosphere.* In the growth of the plant, atmospheric conditions are of at least coëqual importance with the nature of the seed sown and the kind of culture bestowed upon it. That subtle omnipotence, the ethical atmosphere of a school, must be looked after by the guardians of our youth. There are

schools which are charged with potent influences of goodness; in which the children breathe-in virtue. Of all that goes to form such atmospheric conditions, three factors may be mentioned.

The opening exercises may charge the air with ethical ozone, and create the spiritual temperature in which conscience buds and blooms. Music is of especial value to this end. The authorities upon education, from Plato to Froebel and Goethe, emphasize the function of music in moral education.* It rouses and guides the feelings in any desired direction; and, when well used, charges the soul with pure passion, and molds the dispositions; and, by daily repetitions, its vibrations write the laws of noble life in the very tissues of the body. There is no one instrumentality so potent in spiritual influences. The wise master holds in it the wand with which he can touch the natures of his children, wakening responsive echoes, and keying the school to the right pitch. We are but beginning to realize its educational possibilities. At present it is used partly as a recreation, and partly as one more accomplishment to be acquired. We must learn how to use it in the fashioning of plastic character.

Personal influence remains always the last and most vital formative power in the atmospheric influences of a school. The schools that have been most noted for the culture of character, have always had a noble man or woman at the core of their wise systems. Arnold made Rugby. Some vital personality makes every school which makes men. We cannot hope to secure geniuses or saints for all our Peoples' Schools. They are not needful. We can, however, secure in hosts of our schools, as we have secured in many of them, men and women of high

* "Musical training is a more potent instrument than any other, because rhythm and harmony find their way into the secret places of the soul, on which they mightily fasten, imparting grace, and making the soul graceful of him who is rightly educated. . . . And also because he who has received this true education of the inner being, with a true taste, while he praises and rejoices over, and receives into his soul the good, and becomes noble and good, will justly blame and hate the bad, now, in the days of his youth, even before he is able to know the reason why; and when reason comes he will recognize and salute her as a friend."—Plato: "The Republic." Book III, §402. (Jowett.)

"Song is the first step in education; all the rest are connected with it, and attained by means of it. . . . What religious and moral principles we lay before our children, are communicated in the way of song."—Goethe: "Wilhelm Meister's Travels;" chapter 10.

character and of gracious personal influences, whose presence will be the prime factor in their culture of child character. To get them we must make the position more dignified and honorable, and, as such, more remunerative. The most important of society's functions must have the social status and the pecuniary rewards corresponding to the high worth of the teacher's service.

For all this work of moral education, the first step forward is the securing of a proper preparation for the specialty of character-culture in our Normal Schools. We must educate our educators.

R. HEBER NEWTON.

REV. DR. PATTON.

THE practical question whether the teaching of morality in the public schools should be grounded in religion is very closely related to the philosophical question whether morality is itself grounded in religion. For, if religion conditions morality as we believe it does, alike as to its origin, authoritativeness, perpetuity, and content, this is a very strong reason why religion should enter prominently into ethical instruction.

What is morality? This is an important question, though some who ask "Why must I be moral?" do not think it necessary to say what they mean by being moral. It is generally assumed that morality is identical with that system of regulated conduct which prevails among people who regard the decalogue as the law of God. And when the decalogue is so regarded there is propriety, of course, in identifying morality with its teachings; but the case is altogether different when, instead of being considered as the divine norm of conduct, it is looked upon as simply the formulated expression of human experience. What conduct is entitled to be considered as moral? It may be felicitous conduct; if so, the law which enunciates it, instead of being couched in categorical terms, will always begin with an "if," and address itself to men by saying, "This is what you must do 'if' you wish to be happy or promote the happiness of others." Between the old doctrine of the categorical imperative, which says "Thou shalt," and the doctrine of egoistic Hedonism, also old, which says "This is the best in the long run," no successful compromise has as yet been effected, though several attempts at it have been made. Of these none is more worthy

of notice than that which is now being made under the auspices of the philosophy of evolution. Interpreting morality according to Leslie Stephen's exposition of it, we must suppose it to mean the system of regulated relations subsisting between the individuals who constitute what he calls the "social tissue." Moral conduct, according to this view, is therefore customary conduct. Customary conduct represents the conduct that promotes the life and health of the social organisms. So that the ethic of evolution has no categorical, but only a hypothetical imperative. It has no fixed standard. It uses the expression "moral law," but by this it means a generalization stating what the conduct of the organism approximately is, and not a command affirming what the conduct of the individual ought to be. This, however, is not the true meaning of morality. Moral conduct is obligatory conduct; it is conduct that a man *ought* to exhibit. So regarded, it is necessarily related to a standard of behavior, and the standard must be the antecedent of the behavior it is supposed to control. To take this position is to affirm an intuitional, and by necessary consequence a theological morality. For the meaning of "ought" is plain, simple, and underived. It cannot be twisted or changed into anything else. It cannot be generated out of anything else. The expedient is not the obligatory. "Better not" will never grow up into "ought not." The old utilitarianism of Bentham and Mill failed to explain obligation; the new utilitarianism of Spencer and Stephen has had no better success.

Religion conditions morality as to origin. It also conditions it as to authoritativeness. Without a religious basis morality can have no authoritative basis. To this it may be objected that the feeling of obligation exists whatever its genesis may have been, and that being in existence, it must be operative while it lasts. But it is more than doubtful whether the authoritativeness of morality is sufficiently conserved by the bare fact that the feeling of obligation exists. For if there is no good reason for the feeling, the operative force of the feeling will be greatly abated. As long, of course, as a man feels that he ought, he will have an obligatory morality; but whether a man can feel that he ought, after he feels that the feeling need not be attended to, is another matter. Why should I be moral? Why should decalogue-morality be my morality? And, above all, why should I feel any sense of obligatoriness about it? Aside

from supernaturalism there is no satisfactory answer to these questions. The Hedonist may say, "This is the way to act if you wish to be happy"; but he would be met with the reply, "Happiness, that is to say, my happiness, is my affair. I may have another idea of what constitutes happiness, or I may be willing to do without happiness altogether, and at all events it contributes to my happiness for the present to be my own judge of what will be conducive to my happiness in the long run." Again, the utilitarian may say, "This mode of acting will secure the greatest happiness of the greatest number," but the obvious reply to this would be that the greatest happiness of the greatest number is a problem that transcends human arithmetic, and that practically the happiness of the individual is the most sensible thing to think of, unless there be reasons against it better than those which utilitarianism has hitherto advanced. And once more the evolutionist will say, "This the way that you and all men must act if you care for the life, health, and happiness of the social organism." But to this it will be also replied that evolution does not furnish any means of determining what is best for the health of the organism; and that if it did, appeals in behalf of "social tissue" would have very little effect. Evolution must preach personal immortality if it is to secure sympathy for the immortality of society. If there is no life beyond this world for the individual, it matters very little how long there will be a life in this world for the organism. Morality will have fallen upon dark days when the pulpits preach virtue only for the sake of perpetuating society and promoting vigorous digestion in the members who compose it; for following the loss of an authoritative morality will sooner or later come the loss of morality itself.

Of course it is not contended that a general acceptance of empirical ethics would be followed immediately by a repudiation of all moral distinctions. Some account must be made of heredity. There is a certain ethical spontaneity, however it came into exercise, which would not immediately disappear after the ethics of evolution had been accepted. As long as men have their natural instincts, they will go on eating and drinking and caring for life, even though they may adopt a pessimistic theory of existence; and as long as men continue in possession of the ethical instincts which ordinarily influence them, they will exhibit a morality corresponding in a greater or less degree to

the requirements of the decalogue. Moreover, as long as public sentiment demands the practice of morality, we may expect the love of approval so natural to men to act as a barrier against vice. Then, too, the average morality called for by public sentiment will be reflected in legislation, and the sanction of law will save society from some of the more flagrant sins. And once more, though a man's selfishness may incline him to violate ethical propriety, that same selfishness may make him eager to punish such violations on the part of others. Self-interest will secure, for a time at least, the enforcement of laws that protect the fireside. Yet it needs no reasoning to show the insecurity of that morality, which is menaced by inclination, is reinforced by no sense of obligation, is looked upon as social conventionalism, and is kept within the trammels of law by a suspicious selfishness which makes every man distrust his neighbor and perform police duty in watching his behavior. We may concede that public sentiment will exercise a restraining influence after a sense of personal obligation has been lost; but the question is, how long this public sentiment will survive the destruction of the conscience. The conscience of the community cannot be more sensitive than the conscience of the individuals composing it, and when the conscience of the individual ceases to feel obligation, the conscience of the community will sooner or later cease to enforce obligation. We need not look for the inclination to be moral after we have given up the obligation to be moral; and evil inclination will not always be kept in check by the veto of society after it has ceased to fear the veto of the individual conscience. The moral sentiment which constitutes such an important part of our civilization is a religious sentiment. It backs the immutable distinctions of right and wrong by the stern sanction of the law of God. It has been generated through a long discipline, and though it will undoubtedly bear many shocks, it is too much to suppose that it could enter hopefully into the struggle against selfish appetites and desires, after the great principles which lie at its foundation and are the secret of its development had been discarded.

When we speak of the moral sentiment of our civilization, we mean, of course, Christian civilization; for while it is true that all authoritative morality implies belief in God, it is also true that the contents of our accepted morality are historically associ-

ated with the particular beliefs regarding God which are taught in the Bible. We cannot drop supernaturalism out of Bible-morality without sacrificing the authoritative value of that morality; for if that morality has only historic value, why am I bound to comply with it? Why should Christ's law regarding monogamy and divorce, why should his injunctions regarding love and forgiveness, influence men authoritatively if he has no exceptional place in history entitling him to speak authoritatively in declaration of God's will? Yet, it is substantially Christian morality, for which the advocates of a secular morality contend. Their problem is: How can we sever theology from ethics? How can we perpetuate as the practical guide of life a morality which is rooted in convictions of moral obligation, and which has been historically unfolded in Christianity, after the idea of moral obligation has been discarded, and Christianity has been accounted for under the rubrics of naturalistic evolution? These questions have no answer, and the attempt to find a new and non-religious foundation for morality must result in failure.

If we are right in holding that morality is grounded in religion, we need not ask whether the religious aspect of morality should have any place in ethical instruction, for a very important element in that instruction consists in stating the grounds of moral obligation. If the teaching of an exclusively secular morality were advocated only by those who hold that morality sustains no necessary relation to religion, we should not be required to say more than has been already said in support of the position advocated in this article. But the teaching of morality on non-religious grounds is sometimes advocated by those who are in full sympathy with the opinions here advanced, regarding the basis of moral obligation and the debt which ethics owes to Christianity. To teach the religious side of ethics in any degree is by some regarded as contrary to the American doctrine of the separation of Church and State, or as a tyrannical violation of the rights of conscience. We fail to see any force in either of these objections. As to the first, it is enough to make the distinction between Church and Religion. To say that the State cannot recognize religion because it cannot confer exclusive privileges on a particular form of religion, is absurd. To say that we may not be a Christian nation because no single denomination of Christians can lay claim to precedence, is also

absurd. Because we cannot Presbyterianize the State, it does not follow that we must Atheize it. But the State does recognize religion; and in teaching morality from a religious point of view, it is simply following its own precedents and conforming to the analogies of our national experience. As little justice is there in the plea that is sometimes made for the rights of conscience on the part of those, or on behalf of those, who do not believe in supernatural religion or, at all events, in Christianity. The principle of toleration is very precious, but it can be abused. Every man is entitled to the largest personal liberty consistent with the rights of his neighbors and his obligations to the Government. Every man has the right to believe or not to believe as he pleases. But he is bound to do his share toward the support of the State. What is best for the State is determined by the sovereign power, and the sovereign power among us finds expression in the will of majorities, and that will may express conscientious convictions. When the conscience of the majority expresses itself in favor of religious morality in the public schools, and the conscience of the minority in favor of non-religious morality, whose conscience is to be considered? It is sometimes forgotten, in this and in some other controversies, that there are two sides to this conscience-question, and it is too often assumed that the conscience of the majority should yield. This, however, is a very singular departure from Republican principles. Why should we yield to the wishes of the majority on all questions except those which can be made cases of conscience, and consent to submit the conscientious convictions of the mass to the rule of an oligarchy?

It is not doubted that some morality could be taught without any reference to religion. A code of conduct could be drawn up, and children might be required to learn a list of things that they must do and things that they must not do. Ethics could be learned in this externalistic way, as some people learn etiquette. But does ethical instruction consist in telling children that they must not lie, nor cheat, nor steal, nor swear, nor get drunk? It would be a very uninteresting boy who would not wish to know why he should not steal and lie if he felt so disposed; and a wretched system of instruction which made no provision for a proper answer to the question. Is a boy ready to meet the temptations that will assail his integrity when he enters upon the work of life and becomes acquainted with the lax morality of the world,

who has been told simply, on the authority of his teacher's word, that he must be honest? The education which stops with the enunciation of moral rules will not make a deep impression, for when the boy comes to compare the instruction of the school-room with the experience of real life, he will find that there is some incongruity between them. Arithmetic, he will find, was very much what he supposed it was; but as to honesty, truthfulness, and the like,—now that his eyes are open he sees there are a great many people who do not live as he was told to live. And why should he follow the word of the teacher rather than the example of those who, in the new life that lies before him, are his heroes? The secular morality that is proposed would give him no answer to this inquiry, or else it would give him a false one. The question before us, then, is simply this: Shall the children in our public schools be taught to be honest, sober, and truthful without a reason, or for false reasons, or for the true reason? We may as well teach no morality if we assign no reason for it. Shall children, then, be taught to be honest because honesty is right, or because honesty pays? Shall they be told that they ought to tell the truth, or that they will find it to their advantage to tell the truth? Shall they be told that they must not get drunk because drunkenness is not respectable, or because God has said that no drunkard shall enter the kingdom of heaven? The possibility of educating the conscience depends in great measure upon the answer that is given to these questions.

And this matter of educating the conscience is a very important part of ethical instruction: for the most serious questions which we are called to answer in the sphere of conduct are often those in regard to which no rules have been laid down, and to which no ready-made answers can be quoted. The Bible has not settled these questions in the form which they assume in the varying experiences of individual men. The Church cannot settle them; public opinion cannot settle them. They illustrate the autonomy of the conscience. They must be settled by the individual for himself in the sight of God. The most important part of ethical education is that which properly interprets and expounds the place of the individual conscience. Nothing should be allowed to supersede the conscience. No pledges or promises should supplant it. It must be enlightened, of course, but its supremacy must not

be challenged. Herein, indeed, lies the difficulty of the work that is imposed upon the individual, and the grave nature of his responsibility. He must decide, but he must bear the consequences of his mistakes. Herein is seen the importance of educating the conscience. There is needed that delicate moral sensibility which comes only as the result of a deep religious sense of moral obligation and the habitual exercise of the intellect in ethical discrimination. The crude canons of utilitarian ethics will not help a man in making these delicate measurements. For this work he needs an intimate knowledge of the great ethical principles of Christianity, and the craving for personal holiness which will lead him to make constant application of these principles to the concrete experience of every day. This is an education which must be continued in the great school of religious experience, but there is no reason why it should not be begun in the school-room of secular instruction. Moreover, the true teacher of morality will strive not only to cultivate the conscience so that there will be a knowledge of what is right, but also to cultivate the character so that there will be a disposition to do right. But what can mere secular morality do toward cultivating a high ethical nature? Has it a maxim? Has it a motive? Has it an ideal? Has it a future? Has it a sanction? Ask Spencer or Stephen. Christianity says: love God supremely, and your neighbor as yourself. It says: seek God's glory. It says: Jesus is the ideal man. It promises to his disciples personal immortality and the attainment of complete likeness to him. And it speaks in tones of terrific threatening to sinners. The new ethic has none of these elements, and, lacking these, it can have no transforming power.

The feeling expressed by the word "ought" is an ultimate fact in our constitution, and gives us an obligatory morality; but this feeling is inseparably associated with belief in the moral government of God. To preach an obligatory morality is really to preach a religious morality. But it is as important to know what we ought to do as to know that we ought to do it. And when we raise the question whether this or that is what we ought to do, we must have in mind some standard of right. Theists commonly believe this to be the nature or the will (as expressing the nature) of God. To teach morality on the basis of religion is then to command and forbid in the name of God. How, then, are we to know what God wills, or rather,

what is in accordance with his nature which is the norm of right ? The answer to this question must determine, in a measure, the mode of moral instruction. We might trust to intuition. But this would not lead us far. It would give us the empty category of obligation, but would not do much toward filling it. We might seek the will of God by inductions based upon the general experience of mankind. But the ethical *consensus* of mankind would cover a very small area, and we should soon find ourselves picking out such select ethical precepts as might happen to correspond to a preconceived ethical theory. Or, finally, we might accept some one religion as containing a revelation of God's will regarding human conduct. This is what the people of this country have done. Morality with us means Christian morality. Teaching morality means teaching Christian morality; and Christian morality rests upon revelation. We cannot say, with the author of "Natural Religion," that supernaturalism is an accident and is not of the essence of Christianity; for Christianity, bereft of its supernaturalism, loses authority in respect to both ethics and religion. Christian morality must be inculcated as the known expression of God's will. Protestants and Roman Catholics are in full accord upon this point, though they hold antagonistic views regarding the mode in which moral instruction should be conveyed. It is not likely that the Christian people who are known by these names can ever unite in the cordial support of the existing system of public education; but it is certain that as long as they retain their Christian convictions they will express their disapproval of every proposition that contemplates a non-religious system of ethical instruction.

FRANCIS L. PATTON.

MAKING BREAD DEAR.

WHILE only one bushel in seven of the wheat crop of the United States is received by the Produce Exchange of New York, its traders buy and sell two for every one that comes out of the ground. When the cotton plantations of the South yielded less than six million bales, the crop on the New York Cotton Exchange was more than thirty-two millions. Oil wells are uncertain, but the flow on the Petroleum Exchanges of New York, Bradford, and Oil City never hesitates. Pennsylvania does well to run twenty-four millions of barrels in a year, but New York city will do as much in two small rooms in one week, and the Petroleum Exchanges sold altogether last year two thousand million barrels. When the Chicago Board of Trade was founded, its members were required to record their transactions. The dance of speculation has nowadays grown to be so rapid that no count is kept of the steps. The Board was lately reported to have turned over as much wheat in one day as the whole State of Illinois harvests in a twelvemonth. Its speculative hogs outnumber two to one the live hogs in the United States, and it is safe to say that the Board raises five bushels of grain to every one that is produced by the farmers of the West. Securities have become as staple an article of production with us as wheat, cotton, oil, or hogs. One million dollars' worth a day of new stocks and bonds is needed in prosperous years to supply the demands of the New York Stock Exchange, and its annual transactions are nearly thrice the taxable valuation of all the personal property in the United States.

One of the things that would be new to Solomon, if he lived to-day, is the part played by the modern Exchange in the distribution of the products of labor, and the redistribution of wealth. The honest industry that builds up our greatest fortunes is rais-

ing wheat and pork on the Chicago Board of Trade, mining on the San Francisco Stock Exchange, building railroads in Wall street, sinking oil wells in William street, and picking cotton in Hanover Square. While the text-books of the science of exchange are describing in infantile prattle the imaginary trade of prehistoric trout for pre-Adamite venison between the "first hunter" and the "first fisherman," the industry of the cotton plantation, the oil fields, and the farm, is being overlaid by an apparatus of Exchanges which will prove an extremely interesting study to the Ricardo of, say, the twenty-fifth century. These Exchanges are the creameries of the world of labor. The prices of the speculative wheat and the spectral hog of the Board fix those of the real wheat and the actual hog of the field. The negro planter of Georgia who raises his bale and a half must sell it for what the Cotton Exchange says it is worth. The man who works in the ground must take the price fixed for him by the man who works in the air. No one can understand the "corner" who does not comprehend the development and reach of the Exchanges of our time.

The manufacture of prices, like other modern industries, is being concentrated into vast establishments, and these are passing under the rule of bosses and syndicates. The markets, like political parties, are run by the Machine. The people are losing the power of making prices as well as nominations. The "Free Breakfast Table" pays tribute to some clique, whether railroad pool, trades-union, match monopoly, coal combination, pottery tariff infant, or Board of Trade corner, on pretty much everything upon it. The coffee market of the country has lately gone out of the region of unorganized supply and demand into the hands of a Coffee Exchange, with all the modern improvements for speculation. A price factory to make the quotations of butter and cheese has just been established in New York. It deals in brokers' eggs as well as hens' eggs, and has all the approved facilities to enable it to count and sell the chickens that are not yet hatched out of eggs that are not yet laid.

The concentration of news, capital, and middle-men, in a focus; steam, electricity, and credit; the specially modern means of finding out the "statistical situation"; the development of the corporation; the multiplication of huge private fortunes and their union in syndicates; and the lupine standard of

business morality, make the modern market a thing new in development if not in kind. These Exchanges are cosmopolitan legislatures. Their enactments are prices, and their jurisdiction extends beyond that of Congress, Parliament, the Assembly, and the Reichstag. They are more than negative registers of prices determined by a conflux of forces external to them. Under the manipulation of cliques they have become positive agencies of mighty influence, and are the scenes of operations that menace the lives and happiness of nations. The "strong man" now builds corners instead of castles, and collects tribute at the end of a telegraph wire instead of a chain stretched across the Rhine. Money, knowledge, and energy are nearing the boundaries of exploration, and are turning back to monopolize the provinces. The whole world is platted. Such appliances as ours for exchange have never co-existed before, in the history of business. The criminal rich,—those who appropriate the labor of others in one age by brute strength, and in another by brute wealth,—who are to-day degrading competition into a rivalry of adulteration, are seizing upon them for speculative purposes. The control of the machinery of the Exchanges is the control of prices, and the control of prices is the control of property. In markets where the cotton crop, and the wheat crop, and the pork product of the whole country can be turned over half a dozen or a dozen times in a year, it is an easy thing for a combination to get hold of the marketable surplus and dictate its price. The "fittest" in the trade world are those who have learned the magic art of the manufacture of prices, and the Exchanges are shifting the property of smaller men into their hands.

The greatest of these price factories is the Chicago Board of Trade. Thirty years ago, its thirty-eight members were scouring the country back of them to persuade the farmers to send their stuff to Chicago for sale. Cheese, crackers, and ale were spread out in the Board room to induce the members to attend, but for days in succession the minutes of attendance read "none." Last year, the Board received and paid for, in cash, three hundred and eighty-two millions of dollars' worth of farm produce; and the total of its transactions was not less than three thousand million dollars. It has become not only the chief of the food markets, but "the greatest speculative market in the world," as an authority on speculation testified last winter before the

New York Legislature. It is the only market to which all the world goes to trade. Orders to buy and sell come to it daily from London, Liverpool, Glasgow, Edinburgh, Dublin, Cork, Bordeaux, Marseilles, Zurich, Havre, Antwerp, Amsterdam, Berlin, Hamburg.

No other farmer has such a market as this which mobilizes and cashes the crops of the Mississippi valley. Its scores of railroads fetch and carry. Its banks, stretching from the Zuyder Zee to the Yellowstone, bring the capital of the Bank of England and of the Hopes of Amsterdam to meet the farmer when he drives up to the country station with a wagon-load of grain to sell. Its telegraph wires inform him of the prices, the weather, the supply and demand of the world. Its every opinion of value is substantiated by cash. Its warehouses will hold two days' rations for every man, woman, and child in Europe and America. Packing-houses that can, singly, kill ten thousand hogs a day in summer and twenty thousand a day in winter, are there to receive all the live-stock that the prairies may forward. A cargo of grain lately sold in Liverpool on Chicago account had to be disposed of on six months' time. Chicago, whether in harvest-time or midwinter, will any day buy all that any one may wish to sell, and sell all that any one may wish to buy. Liverpool is, in comparison, an awkward country market, where every consignment of grain must be handled and sold as a separate parcel. But here the State inspects all the grain that arrives at Chicago, and gives a ticket of quantity and quality which is a negotiable security, and passes into commerce to be sold and bought, and borrowed upon, while the wheat itself is run with more of the same kind into the graded bins of the elevators.

Farmers and country grain buyers who want to take advantage of high prices, but are too busy to ship their wheat to market, can telegraph a broker on the Board to sell for future delivery. The miller, if wheat looks cheap, can buy for future delivery. These contracts are "futures." It is by their agency alone that the strain on the banks for money to move the crops is so distributed that we do not have a commercial crisis every fall. The fellah of Egypt and the slav of Bulgaria habitually sell their growing crops while green in the field. The distance between their misery, at the mercy of their own ignorance and

the greed of the usurer, and the affluence of our own farmer is as good a measure as any of the unapproachable superiority of the market which fate has given to the American farmer alone of all the tillers of the soil, but which the greed of the cornering syndicates threatens to destroy.

Wheat Adam Smith declares to be the least liable of all commodities to be engrossed "by the power of a few great capitals which buy it all up," because "its owners can never be collected in one place." But that, impossible once, is easily done now by the Board of Trade. By the perfection of its apparatus and the magnitude of its transactions, it is now possible for a clique, almost in one day, to obtain speculative possession of the surplus of a crop, and to insist that it all be delivered to them within an impossible time under a ruinous penalty, or to put it out of reach, and then demand an impossible delivery under a ruinous penalty. Every "future" bushel sold must be made good by the delivery of a real bushel when the buyer calls for it, and every purchaser of a "future" bushel must take and pay for a real bushel when the seller brings it to him. In olden times, when it was a prison offence all over Europe to buy wheat to sell again, it was the buyer who was mobbed and jailed. Nowadays, by a strange reversal of public sentiment, it is the seller who is treated with violence—that is, the "future" seller, the man who, in order to realize present prices, sells the wheat that he is holding in the country awaiting shipment, or which he expects to receive in the regular course of trade. It is obvious that, in the debate on prices on the Boards and Exchanges, both sides must be represented. There cannot be cash buyers without cash sellers; there cannot be buyers of "futures" without sellers of "futures"; there cannot be prices made, stocks accumulated, and crops moved without both, and without all this there could be no Board of Trade. Cornering commodities is only half the modern corner. The better half is cornering contracts. Most of the profit of corners is made up of the damages extorted in the shape of fictitious prices from the country shippers and from the traders on the Board, for not fulfilling contracts which the syndicates have made with them, intending to render them impossible of performance. And every such fictitious price so made within the Board is a real price to the consumers in the world beyond the Board.

The market is in these days no longer the mystery of the few; it is the mystery of the many. After giving men crop reports, market advices, banks, telegraphs, and brokers, it is too late to tell them not to try to use them for their legitimate profit. If the buyer helps the farmer, the seller helps the consumer, and in the world of commerce the consumer is just as good a man as the producer. The "future" seller is the offspring of the modern facilities for business. It is only in a highly organized market, with its supplies of commodities steadily flowing to him, that he could live. A highly organized market could not exist without him. No aspect of the corner is more ominous than that it aims at crippling the seller as well as the bread-eater, and with them the market in which they are as important personages as the farmer.

The "wealthy criminal classes" have been quick to seize on the Exchanges, at the risk of breaking them down, as the best of all instruments for depredation. With the machinery of the Liverpool Cotton Exchange a year ago they stopped fifteen million spindles and took away the livelihood of thousands of men, women, and children. Hardly a month passes on the New York Produce Exchange, one of the witnesses said before the Legislative Committee investigating corners, without a corner or a squeeze. But it is the Chicago Board of Trade which offers the largest and the favorite field for the cornerer. It is willing to give or take unlimited quantities at the figures it makes. It can put the combination of rich men in instant possession of the crop that is in market and of contracts for all that is to come. The *morale* of the Board permits the millionaires who have solicited these contracts, and "forestalled" the market for the purpose of making others break them, to put prices to any height in order to exact fatal damages from their victims. It is the code of honor among wolves that no high-minded lamb will squeal. The same class that administers trusts for the trustee, runs corporations to wreck the small capitals they were intended to consolidate, and finds only a private use in public franchises, is burrowing into the Board of Trade to kill trade. The passion for enslaving, forbidden by a squeamish civilization to buy men, finds a vent in capturing the raw material of human life.

Corners used to come on the Board of Trade once in a year or two. Now there are corners almost all the time. The Chicago corner used to be the venture of some local Titan, and was felt

only within the then provincial jurisdiction of the Board. Now, it is often the cosmopolitan work of the combined capitalists of half a dozen cities, and its effects, as the London "Times" said of the pork corner of 1880, are felt in advancing prices all over the world. When six million bushels of wheat were handled by a syndicate, ten years ago, it was felt in predatory circles that the civilization of the nineteenth century had about reached its grandest heights; but sixty million bushels of corn and twenty million bushels of wheat are now pocketed almost without exciting remark. Corners generally used to fail; but the accumulated experience of many collapses has not been in vain. Such mistakes are not now made as that of the wheat corner of 1872, which was begun in the face of the harvest and was drowned out by the rush of wheat from the farmers, who dropped all other work and dried their green wheat in stoves, pots, tin cans, anything in which it could be heated, with the result of forcing down prices on themselves forty-seven cents in twenty-four hours. Now, while the farmers are selling the markets are kept down. It is after the crops are out of their hands that the manipulators put prices up. The corner of last July followed upon the smallest surplus the farmers have had in their hands for many years. The Board has sometimes had rules to prevent corners, but with the beginning of this year the corner rule was abolished through the influence of the wealthy operators. The radius of the combinations of capital to corner the crops is lengthening year by year. The great corner is still to come.

The late disastrous shortages of the crops of Europe caused the machinery of the Board to be promptly set in motion. A series of corners in wheat, pork, and other articles began, which have not yet ceased, and have produced almost every kind of evil. The wheat corner of 1879 was commanded by a New Yorker. It began with an inspired chorus of prophecies of low prices, which continued as long as the clique were buying of the farmers. The price was run down to eighty-one and a half cents a bushel. When all the wheat and wheat contracts to be had were obtained, the price was raised to one dollar and thirty-three cents. In every way the results of this corner were deplorable. The markets were crazed. The cliques held, according to their own statement, twenty million bushels, and, according to the estimate of close observers in the trade, seventy million bushels.

At one time, their wheat was piled up in the elevators and on the railroad tracks, intentionally stopping the way, so that no other wheat could be got to market by the farmers and dealers. Wheat was refused to exporters at prices they could afford to pay. The English buyers went to Bombay and Calcutta; and the East Indies, which sent their first sample to Liverpool not ten years ago, have, in consequence, taken a place next only to us in supplying the British market. During the winter, four hundred vessels lay for months in New York harbor, the owners pleading for wheat, even at ruinously low rates. Many of them ran into debt, and the majority of them finally had to sail away to seek cargoes elsewhere. When the time came to despatch this wheat from Chicago and New York to Europe, to put it out of the way, the head of the clique said to the railroads: "I will give you so many million bushels to carry; if you do not take it at my rate, I will ship it all by lake in the spring." The cutting of rates which ensued was one of the irritating causes of the war that followed among the trunk lines. In the same way syndicates have repeatedly forced the navigators of the lakes to take such rates as they chose to pay, for there was no one to compete with the engrossing shipper. Transportation, overtaken at one time and at another idle, is hopelessly deranged; and all the banking and other business that must attend the movement of the crops goes by fits and starts. Three out of every four flouring mills of the country were kept idle for over two months. One of the oldest members of the Produce Exchange prepared for the Legislature an estimate that this syndicate, by not selling, and by not letting others sell, and by fleecing those who had been inveigled into dealing with them, and by the injury that had been done to the millers, the shipping interest, the exporters, and the consumers of flour, had caused a loss to the country of not less than three hundred million dollars.

The pork corner, which came at the same time as this in wheat, was described as follows by the London "Times": "Amid the turmoil of the Presidential election, there has been closed one of the largest and most successful speculations which has ever excited the brain of Chicago—the Armour pork corner. Its influence in advancing prices was felt in every part of the world. A Chicago dispatch of November 5th, says: 'In July, 1879, after one member of the firm of Armour & Co. had returned from

Europe, where he had been taking observations of the pork market, the firm began buying pork (at eight dollars a barrel), and in December, when it had risen to fourteen dollars a barrel, closed out, making a profit of two million dollars. Not satisfied that it had reached the highest price, they continued buying until pork had dropped to nine and a quarter dollars a barrel, absorbing their profit and an additional million. In April of this year they again began buying at ten dollars a barrel, and bought up three hundred and fifty thousand barrels of pork, and one million two hundred and fifty thousand barrels of 'futures.' For the last three months they have been closing out their gigantic purchases at prices ranging from sixteen to eighteen and a half dollars. They cleared over seven million dollars on this deal, and are winners on the two deals to the extent of six million dollars." There are giants in these days, and their caves are in the Exchanges.

The price of pork was more than doubled, flour was put up an average of two dollars a barrel, and beefsteak at least one cent a pound, as the result of these manipulations. This increase in the cost of living has not subsided. Pork and meat continued to advance. They were higher the next year and higher still last year, when pork sold for twenty-four dollars and seventy-five cents a barrel. Wheat, too, though it has fluctuated violently, has remained in the hands of the manipulators, and every year since the corner of 1879, the average price the miller has had to pay has been higher than that of the year before. The universal strikes into which the laboring people have been forced in the last two years are traceable directly to the increase in the cost of living, which these corners have done so much to produce. The loss from these strikes has been incalculable. That at Pittsburg alone is estimated to have cost us at least ten million dollars. The following sentence is from a petition to Congress to which a member of the Produce Exchange personally obtained the signatures of "a thousand substantial men": "As only men of large means or extensive credit are capable of engaging in these enterprises, they become essentially an array of capital against the industrial classes, wherein the banks and moneyed institutions are almost invariably drawn to the support of the former against the latter."

This is the communism of the syndicate, and it is the only communism the United States have yet produced.

One summer afternoon, a year ago, as a party of Chicago business men were idling in their yacht over the cool waters of Lake Michigan, one of them pointed out a great lake propeller shouldering its way eastward. "There goes some of our 'corner' wheat to Liverpool," he said. Propellers, sailing vessels, railroad cars were hurrying millions of bushels away from Chicago to put it out of the reach of the millers, the exporters, and the traders on the Board. It must, at any cost, be made scarce and dear for everybody. It was wanted for flour and as the stock-in-trade of the Board. But, as far as the bread eaters and the traders of this country were interested, it was thrown away, as the Dutch threw away the spices of the Moluccas. Such of it as Liverpool would take was sold at an average loss of ten cents a bushel, in order to extort twenty cents a bushel from the American consumer. Much of it lay for a long while stored in England unsold, while the working men and women from one end of the United States to the other question whether it is better to work for wages on which they cannot live, or not to work at all. One of the "business" men of New York testified before the Corner Committee, that he sold corn to go to Europe for twenty-five cents a bushel less than he made the buyers in New York pay him. Another member of the New Produce Exchange said that he had seen the agents of the cornering cliques standing at the doors of the flour-mills bidding away the wheat that was needed for bread. None but a free people would submit to such wrongs.

A great many, perhaps a majority, of the farmers believe that to them, at least, corners are beneficial. They see only the high prices, though these usually are made after the grain has left their hands, or when they cannot get it to market because the wheat of the clique stops the way. During the Chicago wheat corner of 1872, the elevators combined to rent out their bins and keep them empty in order to prevent any more of the farmers' crops from coming to market to embarrass the cornerers. High prices were paid during a short-lived excitement, but they were more than offset by the break that followed. The men most injured in that corner, aside from the consumer, were, as in most corners, those who buy from farmers at the country stations and make up car-loads to ship to the city. These men had bought large quantities of wheat, which they had sold for "future" delivery at prices that would have paid them only a fair profit. The

collapse of the corner inflicted upon them a loss of thirty and forty cents a bushel, and swept away in a moment from hundreds of them the accumulations of years of patient trading, during which many of them had never made a speculative deal, though they were often "future" sellers. The commercial reports of the Chicago papers show that, during the corner of 1881, shipments were stopped, elevators gorged, the lake marine paralyzed, sailors and laborers thrown out of work, and a blockade of the entire grain business threatened. Receivers of grain were ruined, and so lured into speculation. "Some of the houses which have bought and sold most heavily for speculative customers," said a Chicago journal at the beginning of 1882, "have been those who, previous to last midsummer, had done very little except in buying and selling for actual exchange between the producer and the consumer."

The commercial editor of one of the leading New York dailies, who had been on the Produce Exchange for eleven years, says: "Since these corners began, there is a large proportion of merchants who had a good receiving business who are now simply brokers in options and get all their business from the cliques. At the time I went on the Exchange, there was not a broker in the grain trade, except those who bought and sold actual stuff for export. Now there are a few of these, and, I should judge, over one-half or three-fourths of the members engaged in the grain trade are men who were once engaged in legitimate business out of which they have been driven by corner operations." If there was any advantage to the farmer from such operations it would not be a natural advantage, but there is no advantage. These corners put prices down when the farmers want to sell, and put them up when the miller needs to buy. They exaggerate gambling by intensifying the fluctuations of price and they cripple legitimate business. They derange the rail, lake, and ocean transport of the farmers' crops to market. They drive away the foreign buyers to patronize the Hindoo ryot, who is happy, our Consul at Calcutta says, if he can earn ten cents a day. They convert the exporters and legitimate dealers on the Board into brokers and claquers for the syndicates. They will surely, if unchecked, destroy the Board, which, with all its faults, is the finest piece of mechanism commerce has yet invented, and without which the American farmer could not retain his command of almost antipodal markets. The farmer who thinks cor-

ners are a benefit should consider well the fate of the oil producer at the hands of the oil corner, which has become one of the established institutions of the country. The cornerer is a middle-man who leaves nothing for the end-men.

The most remarkable fact in the development of these Exchanges, that which completes the corner, is still to be pointed out. One of the managers of the New York Produce Exchange told a committee of the New York Legislature that, if the State should pass a law the Exchange did not like, and a member attempted to take advantage of it, they would expel him, and he added that men were constantly turned out for appealing to the law. Members are therefore practically compelled, contrary to their by-laws, whether they desire to do so or not, to submit their differences with their fellows to the summary tribunal of a committee of members, perhaps interested parties, and forego recourse to the law. When the proceedings by which the New York Stock Exchange expelled Mr. W. J. Hutchinson last year, whether justly or not is beside our purpose, were taken into court, the President of the Exchange refused, day after day for months, to answer any of the inquiries of the court as to the action of the Exchange. A member had been deprived of his seat, worth thirty thousand dollars, and his means of livelihood; but the Exchange insisted that neither in this nor in anything else was it subject to the jurisdiction of the courts. The New York Stock Exchange, which is the most powerful instrumentality in the world of finance, thus took its stand outside the law. The courts have decided that the seat of a member is property that can be seized by a creditor and sold for his benefit; but the creditors who seized Mr. Ketcham's seat have been trying for three years to sell it. Those who might buy are given to understand that the Exchange does not recognize the right of the courts to make any such decision, and will nullify it by refusing to accept the purchaser as a member, when he comes up for his election, which is ordinarily a matter of course. The courts of Illinois, hastening to do for the Board of Trade what the New York Stock Exchange is trying to do for itself, have decided that seats in the Board, which are every week bought and sold, are not property. The social consequences of this status of these Exchanges scarcely need be pointed out. These are the greatest markets in the world, but they are not open markets. No one can come in who comes in by way of the law. No one can remain who summons

an associate before the courts of justice, under the delusion that there is no spot under the Constitution where the laws of the land are not in order. The public must buy its securities of the Stock Exchange; the world must go to the Board of Trade to buy its food, and the American farmer must sell his crops there. But, for all that, they claim to be "voluntary associations," intrenched within lines picketed against the law.

The sovereignty to which the Produce Exchange and the Stock Exchange aspire has been conferred upon the Chicago Board of Trade by an unbroken line of decisions by the Supreme Court of Illinois. Year after year, those who have been cornered on the Board by its rich syndicates have appealed to the Supreme Court, sometimes for prevention of the wrong, sometimes to remedy it. The monotonous response of the judges has been that the Board was a voluntary association, and that it was not amenable to the courts. The latest decision, just handed down, is a complete abdication of all the rights of the State to exercise any judicial supervision over this corporation, though created by it. Its effects will be felt to the farthest point where a bushel of American wheat or a barrel of Chicago pork seeks a consumer.

The victims of the wheat corner of last July appealed to the court for help on these grounds:

- (1.) That, expecting to receive the wheat and intending to deliver it, they had bargained to supply it to certain persons, who had secretly formed a clique, and who, in order to make the performance of their contracts impossible, as well as to extort an outrageous price from the public, had bought up all the wheat in the market, and ten million bushels more.

- (2.) That the clique had done this, criminally and fraudulently, and then demanded ruinous damages of them, under the guise of fictitious prices.

- (3.) That they had been compelled by the Board against their will to submit the settlement of this claim to a special tribunal of the Board, outside the arbitration committee.

- (4.) That this tribunal was instituted in violation of the constitution of the State, the charter of the Board, and under an illegal by-law.

- (5.) That it had not been made up even as required by this

by-law, and that its procedure had not followed the rules of the Board.

(6.) That it had excluded necessary evidence, had admitted improper evidence, and had been guilty of gross misconduct and fraud.

(7.) That it had made an unjust decision contrary to the rules of the Board and the laws of the land, awarding heavy damages to those who, by conspiracy, had made it impossible for them to fulfill their contracts.

(8.) That from this decision there was no appeal.

(9.) That unless the court would immediately interfere to prevent the Board from acting on this decision, they must either pay these cruel and fictitious damages or be expelled without charges, trial, or notice; be deprived of their membership in the only Exchange where they could carry on their business, worth at least \$15,000 a year to them; that their seats, worth \$3,800 each, would be taken from them, and with these their share in the capital of the Board—\$200,000—and its surplus of \$275,000; and that the consequences of this, to them, their families, their reputation, and their business, would be irreparable, and not to be made good by any money compensation.

To all these statements the Board, in serene reliance on the previous decisions of the court, made answer, in three lines, that all these things might be so, but that it was none of the court's business; and the court said the Board was right, and denied the petition. By this decision the court declared itself the ally of the makers of unnatural prices for food. Hundreds of thousands of dollars were paid, the next morning, to the clique as a penalty for not delivering to it wheat which was already in its possession. Nothing remains for this court but to decide that it could not interfere if the Board decreed that the bodies as well as the fortunes of the cornered should be divided up among the cornerers.

It seems incredible that this should be law in any civilized community, but it is law in the whole food world. This is more than Illinois law. There are years when one man in every three in England, and one man in every twenty in France, must live on American wheat, and every one of them is deprived, by this decision, of the protection of the law in buying his food. Buyers have no rights if sellers have none. Dante saw written over the

door of hell: "All hope abandon, ye who enter here." On the threshold of the Board of Trade, the Produce Exchange, and the Stock Exchange, is inscribed: "Your rights resign within these walls."

This ends an era. Not even the Witch of Endor could have made Adam Smith believe, when he was laboring to prove that men did not deserve to be pilloried for buying and selling wheat, that within a century trading in food would be carried on with this absolute license, in markets of this power and finish. The jail, which was the habitat of the distrusted grain trader of his day, has become this palace of exchange,—capable of handling the world's surplus in an afternoon; fixing the price of real wheat by that of fiat wheat; connected by telegraph with the stomachs and bank accounts of Christendom; bringing all the owners of the crop into one place, and then overcoming them by a combination of capital, banks, and the courts; created to apportion the food of nations, and perverted to make artificial famines; a field for free contract, where the most profitable business is conspiracy to make the performance of contracts impossible; a creation of the State but declared officially to be above the law. "Progress" can go no farther than this. It is of no use for generous souls in search of a Cause to take the stump for freedom of contract here. They are a century too late. The fatality of their environment is against them. Freedom has o'erleaped herself.

If courts of summary jurisdiction, picturesquely called Courts of the Dusty Feet, were a necessity of the mediæval fair, which was the chrysalis of the modern Exchange, they are a thousand times more necessary now when business is done by electricity. No Exchange could survive the delays of the ordinary courts. But these summary tribunals must be courts of justice, not of injustice. They are to exist only as quicker ways of affording the same remedy for wrong as would be afforded, but with less celerity, by the courts. They must not be handed over to the cliques for purposes of spoliation. The rights of the farmers, the traders, the consumers, are of too vast importance to be abandoned to tribunals above the law, and composed of the members of the guilds that allow such uses as we have described to be made of them. The members who are the "judges" of these tribunals are men preoccupied with their own business. They are ignorant of the law and the rules of evidence. They

are constantly trading in the market, and are almost certain to be interested in one way or another. They may sometimes be the brokers of the very cliques who appeal to them to secure the results of their own conspiracy. They are certainly swayed by the false notions of business honor and morality which prevail in these Exchanges. Contracts are sacred, but the obligation is mutual. When you bind me to deliver you wheat or pork, it is you who break the contract if you prevent me from getting it.

"But these are gamblers." Too many of them are. But their dice are loaves of bread. The chances they take are the chances of human life. Real prices all over the world rise and fall with their gambling prices. That they may play their game of forfeits inside the Board, thousands who cannot get enough to eat must act tragedy outside. Civilization forms an acquiescent ring around these thugs of the Board and Produce Exchange, when it knows that every movement of their struggle within intensifies the universal struggle for existence without. It is unendurable that the courts of the Board and the courts of the State should permit one set of gamblers—even to punish another set of gamblers—to force the prices of bread and meat to starvation figures.

By the use the Exchanges have made of this privilege of having courts of their own—which, in the case of the food markets, under pretense of settling differences among the members, literally permit them to rob the world of its daily bread—they have invited the indignant interference of the public. Summary tribunals the Stock Exchange, the Board of Trade, the Produce Exchange must have, but they must not be such tribunals as these. The trunk line railroads have put railroad civilization ahead a generation by abandoning private war and referring their quarrels to the arbitration of such a man as Charles Francis Adams, Jr., an outsider, expert and just. Something like this must be done to civilize the combats on the Board of Trade. All the markets are being paralyzed by manipulation. They can be saved only by the establishment of tribunals, of competent and disinterested men, to settle the disputes that arise in the course of business and cannot wait for the courts. These official arbitrators could be assisted, if need be, by arbitrators chosen by the disputants. They should be empowered not only to receive evidence as our judges do, but, unlike them, to send out for any

evidence that they wanted. Above all, the supremacy of the law should be acknowledged, and the sacred principle enforced that he who asks equity must do equity. If an outsider can solve railroad disputes,—the most intricate that arise in any business,—Board of Trade issues can be settled as easily. Those who desire to prevent gambling and plundering from becoming the chief ends of the Exchanges can do nothing more useful than to bring them back within the jurisdiction of the law. The courts have disciplined the Common Carrier for generations; it is time to bring the Common Trader within the fold. None but national regulation will do this effectually. If New York attempts to control the evil, it will emigrate to Chicago, and Illinois could only drive it to St. Louis. When capitalists combine irresistibly against the people, the Government, which is the people's combination, must take them in hand. One of the unmistakable signs of the inability of the legislative committee that recently investigated corners in New York to grasp their subject was their failure to see anything out of the way in the attitude of the Exchanges toward the law.

Dr. Drysdale, of London, at the last session of the Social Science Congress, pointed out how the death rate rose with scarcity of food. The mean age of the rich in England, at the time of death, is fifty-five; among the poor it is not thirty. The death rate among the children of the comfortable classes is eighty in a thousand; among the working people of Manchester and Liverpool it is three hundred in a thousand. Dr. Farr shows that the death rate of England decreases three per cent. when wheat declines two shillings a quarter. As food grows dear, typhus grows plenty. Scarcer bread means more crime. An increase of one larceny to every hundred thousand inhabitants comes with every rise of two farthings in the price of wheat in Bavaria. The enemies of the men who corner wheat and pork could wish for no heavier burden on their souls than that they should be successful. As wheat rises, flour rises; and when flour becomes dear, through manipulation, it is the blood of the poor that flows into the treasury of the syndicate. Such money costs too much. The following from the records of the Chicago market shows how the wheat corners of the last four years have enhanced the price of bread. The coincidence is doubly significant, because flour is not one of the speculative commodities of the Board. It is bought and

sold only for use. But its prices are glued to the speculative quotations of wheat:

THE CORNER OF 1879.

Wheat lowest, January, 81 $\frac{1}{2}$; highest, December, \$1.33.

Flour lowest, January, \$4.00; highest, December, \$6.50.

THE CORNER OF 1881.

Wheat lowest, February, 96 $\frac{1}{8}$; highest, October, \$1.43.

Flour lowest, February, \$4.75; highest, September, \$7.50.

THE APRIL CORNER OF 1882.

Wheat highest, April, \$1.42; falling to 91 $\frac{3}{4}$ in November.

Flour highest, May, \$6.25; falling to \$4.75 in December.

The return of the price after the corner does not fill the stomachs that have been pinched for months. Every moment the corner lasts there is a mouthful of food the less for the laboring man. Every hour of its continuance some child in Pittsburg or Manchester grows more faint, and every day hundreds of little hands let go another finger from the slippery edge of existence. One of the iron manufacturers of the West, President O. W. Potter, of the North Chicago Rolling Mills, the employer of many thousands of men, when questioned in May about the strike of iron-workers, then believed to be impending, and promising to be the worst that had yet taken place in this country, said:

“The laborers oppose the reduction of wages for the very good reason that they cannot live upon any lower wages. And that is true. They cannot stand the reduction with the high price of living. There are some things that are not to be talked about in public that bring this about, and one of them is the cornering of food on the Board of Trade. A few men manipulate the foods of the workingmen, and create a corner in wheat and meats, and the laborer has to pay the increased cost. They turn the screws, and up go the prices a notch or two. And they may let up so that the market goes down a little; but all the time a few men are making money, and the laborer gets no better fare and pays no lower price for the necessities of life. I am apprehensive of the results that all this will bring about, and there is more anxiety in certain quarters about the future than people dare to imagine.”

Carlyle has handed down Louis XV. to us as “the great regreter of bread.” The sweetest epitaph on any tomb is on the

stone to the memory of Sir Robert Peel: "He gave the poor cheap bread." The Carlyle who hunts through the newspapers of this generation, for the history of its people, will dig the regraters of our Boards of Trade and Produce Exchanges out of their obscurity, to write against their names: "They made bread dear."

HENRY D. LLOYD.

WOMAN IN POLITICS.

MORE than a quarter of a century ago a strong and determined effort was begun to obtain for woman a coördinate influence and power with man in the management of her own individual affairs and in the regulation of those of the public at large. Originating with members of the female sex, the movement was at first confined to a limited portion of the United States, and was conducted by a few advanced and perhaps abnormally constituted women, to whom in a short time were united a half dozen men of similar tendencies and characteristics. One of the principal objects of many of the women appeared to be to make themselves look as much as possible like men. They cut their hair short, parted it on one side, and displayed longings for short frocks and trousers. Strange to say, the men who affiliated with them exhibited inclinations toward femininity. They wore their hair long, parted it in the middle, and donned coats the skirts of which almost touched their heels. Both sexes of this advance guard were, however, of one accord in their abuse of the average man and woman. The first they professed to regard as a tyrant and a monster, to be held up to execration for his wickedness, while the other was a faint-hearted slave, in whom thousands of years of captivity had annihilated the overwhelming mental and physical vigor she had originally possessed, and who now for her abject subserviency to her oppressor was entitled only to the scorn and contempt of her more enlightened and progressive sisters and brothers.

At first the attempt to emancipate woman from the thralldom in which she was supposed to exist was met both by good-natured derision and stern denunciation. It was either looked upon as a joke or its promoters were regarded as being outside the pale of decent society. But, whether treated with ridicule or abuse, the asserters of "woman's rights" were almost universally regarded

as a set of impracticable fanatics who, being disappointed in their efforts to get husbands or wives, or else unhappy in their domestic relations, were levying war against the very foundations of society, and endeavoring in their mortification and rage to make their fellow creatures as miserable as they were themselves.

But, as generally happens when the adherents of a creed or a system are energetic and unscrupulous in its propagation, the originators of the movement in question little by little obtained the countenance and active support of many persons of well-balanced and erudite minds. It began to be recognized that there was a good deal of truth in the mass of platitudes and absurdities which the short-haired women and long-haired men enunciated. Their yearly gatherings became more and more respectable, and many newspapers and magazines supported more or less fully the doctrine of the equality of the sexes. Eventually it came to be acknowledged, through the action of that spirit of fairness which is at the bottom of human nature, that the field of woman's usefulness to herself and the world at large was unduly circumscribed; her right to labor in her own way for her own support and that of those dependent upon her was—grudgingly, in some instances—conceded; the learned professions of medicine, theology, and law were, in a measure, opened to her; she was permitted to fill certain public offices, and in some States a restricted franchise was conferred upon her. At the present time she can practice medicine almost anywhere in the civilized world; several religious denominations permit her to expound their faith; some of the States of the Union admit her to the bar, and one Territory gives her judicial powers. Her right to work in any field of labor she may select is granted; her person and property are as well protected by the law as those of man; she has all the rights and privileges necessary for her material and mental prosperity, and she is not required to serve in the militia or the *posse comitatus*, to sit on juries or to take her turn at the pumps of a sinking ship. But she still contends—or, at least, those who assume to represent her do—for the rights of co-education, of unrestricted suffrage, and of holding political office. The first of these demands does not come within the scope of the present discussion. The other two we propose to consider briefly, and to show that, in our opinion, grave anatomical and physiological reasons demand not only that the progress of the revolution should be arrested, but that,

contrary to the ordinary course of procedure in other revolutions, this one should go backward.

It may be asserted, without fear of successful contradiction, that the governing power of the world is to be found in the brain of mankind. If it were not for the predominance in this respect which the human species exhibits over the lower animals, it is quite certain that they would long since have swept their present masters from the face of the earth. The mere fact that they do not possess the faculty of combining so as to act in concert against man is of itself sufficient to prevent so dire a catastrophe. Their brains are neither sufficiently large, nor is their cerebral structure highly enough developed, to admit of their carrying out, or even of conceiving, a systematic plan of operations against the order of created beings which now holds them in subjection. Brain, therefore, being the matter which by its inherent power of evolving the mind places the beings possessing it in the highest degree of perfection, at the head of creation, it is important to ascertain, in the determination of the question before us, what are the essential points of difference between the mind-producing organ of man and that of woman.

In the first place, the brain of man is larger than that of woman. Very many observations made by different investigators in different parts of the civilized world lead to a general accordance of results on this point. It is quite true that the brains of some women are larger than those of some men, just as some women are vastly superior mentally to some men. But the question is to be determined not by taking a plus extreme in the one instance and comparing it with a minus extreme in the other, but by taking the average of many examinations, or by comparing plus with plus and minus with minus. The average difference has been variously given by different authors as being from four to six ounces, according to the nationality of the subjects; but the mean as established by Welcker appears to be about as correct as such determinations can be made. This observer found the average male brain to weigh one thousand three hundred and ninety grammes, or about forty-nine ounces, and the average female brain twelve hundred and fifty grammes, or about forty-four ounces, showing, therefore, a difference in favor of the male brain of five ounces. The proportion existing between the two is as one hundred to ninety; that is, the average male brain is ten per cent. heavier than the average female brain.

But relatively to the weight of the body in the two sexes, there is no essential difference in the weight of the brain. The body of the female is shorter and altogether of slighter build than that of the male. The difference in stature is about eight per cent., so that relatively to her height the brain of woman is but two per cent. less in weight than that of man. In a series of eighty-one males cited by Quain from the records of several observers, it was found that the weight of the entire brain and that of the body at the age of twenty years and upward bore the proportion to each other of 1 to 36.5, and in a series of eighty-two females as 1 to 36.46. The proportionate weight of the brain in the two sexes does not, therefore, according to these figures, differ materially. Really, however, the matter is not of any psychological importance, for numerous observations show beyond doubt that the intellectual power of an individual does not depend upon the weight of the brain relative to that of the body, so much as it does upon absolute brain weight. If the reverse were the fact we could increase the intelligence of a fat man or woman by subjecting him or her to a Banting system of diet, or produce a contrary effect by feeding a thin person on fat, starch, and sugar. It has not been observed that emaciated individuals are endowed with superior mental qualifications, or that corpulency necessarily tends to the production of imbecility. Moreover, there have been many determinations of the weight of the brain in individuals who had been remarkable for intellectuality, and though the weight has been in excess of the average, it has never been noted that there was any relation between the intelligence and brain-weight on the one side and the weight of the body on the other. Generally speaking, the size and weight of an individual's brain are in direct relation to the mental capacity, and though there are some exceptions to this statement, they are not enough to invalidate the general conclusion. In ten men remarkable for their intellectual development the average weight of the brain was 54.7 ounces, or 5.7 ounces above the average weight of the male brain. Of these, the brain of Cuvier, the great French naturalist, weighed 64.5 ounces. Not only is there no record of a healthy female brain reaching this weight, but the number in which the weight has gone over fifty-five ounces is exceedingly small. However, when we compare the largest male with the largest female brain, the average difference of five ounces is very much exceeded. Thus, of two hundred and

seventy-eight adult male brains, the maximum weighed sixty-five ounces; while of one hundred and ninety-one adult female brains, the maximum was only fifty-six ounces—a difference of nine ounces, or nearly double the average.

The female brain, however, is not only smaller than that of man, but it is different in structure, and this fact involves much more as regards the character of the mental faculties than does the element of size. Thus, accurate measurements show that the anterior portion of the brain comprising the frontal lobes, in which the highest intellectual faculties reside, is much more developed in man than in woman, and this not only as regards its size, but its convolutions also. Taking 100 as representing the entire length of the brain, the frontal development in man will be expressed by the figures 43.9, while in woman it will be indicated by the figures 31.3. Now, the part of the brain which is especially concerned in the evolution of mind is the gray matter constituting the cortex, and this is increased or diminished in accordance with the number and complexity of the convolutions. The frontal lobes contain a greater amount of gray cortical matter than any other part of the brain, and they are, as we have seen, larger in man than in woman.

Again, it is only necessary to compare an average male with an average female brain to perceive at once how numerous and striking are the differences existing between them. Not only is the former longer, but its vertical and transverse diameters are greater proportionally than those of the latter, and hence the shape is quite different. Moreover, its convolutions are more intricate, the sulci are deeper, the secondary fissures more numerous, and there is some reason for believing—though the observations on this point are not perhaps sufficiently numerous to warrant the positive assertion—that the gray matter of corresponding parts of the brain in the two sexes is decidedly thicker in man than it is in woman. It is quite certain, as the observations of the writer show, that the specific gravity of both the white and the gray substances of the brain is greater in man than it is in woman.

It is not necessary, therefore, in order to the advancement of the view to be presented in this connection, that we should insist upon the fact that as man has more brain than woman he must possess more mind. The question we design to submit is not so much one of quantity as it is of quality. The brain of

woman is, as we have seen, different from that of man, and difference of structure necessarily involves difference of function. Doubtless, it is perfectly adapted to the proper status of woman in the established plan of nature, and for that very reason it is not suited to the work which is required of man's brain. It is a brain from which emotion rather than intellect is evolved, and this circumstance, while it constitutes one of the strongest factors among those which are concerned in the preservation and happiness of the human species, is, at the same time, one which thoroughly disqualifies her in whom it is manifested for those sterner duties which must be performed through the exercise of the intellectual faculties. The best wife, the best mother, the best sister, would inevitably make the worst legislator, the worst judge, the worst commander of a man-of-war.

To this great preponderance of the emotional over the intellectual nature is due the fact that very few women are capable of an intense degree of abstract thought, no matter how much education they may have received. The female brain, besides being an emotional, is, like that of the quadrumana, an imitative brain. It is not capable of originating, though it copies well. No great idea, no great invention, no great discovery in science or art, no great poetical, dramatic or musical composition, has ever yet emanated from a woman's brain. There have been two or three second-rate female painters, and perhaps one first-rate female novelist,—and when that is said, all is said. Who, however, will venture to say that the brain which evolves a mother's love, a wife's fidelity and self-abnegation, a sister's devotion, a woman's gentleness, forbearance, and constancy, is not a better brain than the one that prompts to the making, executing, and interpreting of laws, to arctic voyages, to the discovery of electric telegraphs, or to the building of wonderful suspension bridges?

As woman cannot reason abstractly, neither can she reason exactly. She does not, in fact, while having an abhorrence of falsehood, understand the necessity for being exact in the ordinary affairs of every-day life. She tells her physician, for instance, that she "has eaten nothing for a month," and if pressed as to whether she means what she says, replies that really she "eats nothing at all," and if still further pressed and requested to consider for a moment the meaning of the words she uses, answers, with entire unconsciousness that there is any

difference in the two statements, that she may "take a roll and an egg and a cup of coffee for breakfast, and an infinitesimal piece of chicken and a modicum of pie for her dinner," but that she does "not call that anything." On account of her inability to be exact in regard to her age, the diseases she may have had, her mode of life, and other matters in which exactness is required, life insurance companies decline to issue policies to her. For the like reason, many corporations which loan money will not lend to women, though the security be as good as gold itself.

It is owing to this difficulty of being exact that the female mind experiences overwhelming obstacles in the study of mathematics. It is not a matter for surprise that the school-girl, under the idea that she must pursue the same course of study which experience has shown to be most advantageous for boys, suffers with headache and other symptoms of disordered cerebral action when she ventures into the domain of spherical trigonometry and the differential calculus. The attempt to convert a woman into a mathematician is generally very much like trying to make a hare drink brandy and soda. You may, it is true, sometimes succeed, but then you find not only that the animal has acquired a useless accomplishment, but that the qualities characteristic of a hare have disappeared. It is made very uncomfortable, and for all leporine uses it is irretrievably ruined. The example of Mrs. Somerville, the one mathematical woman of the age, will doubtless, occur to some persons as an instance in opposition to this view. But an occasional exception is to be looked for, and does not invalidate the correctness of the opinion expressed. Besides, this lady is chiefly remarkable for the fact that she was a woman. She made an abridgment of Laplace's "*Mécanique Céleste*," and wrote two or three excellent works on the physical sciences, all very creditable productions, but scarcely sufficient, had she been a man, to cause her name to be very widely known. As one of the most friendly of her biographers says, she never reached the grade of original observation or ideation.

A strong point in the mentality of woman consists in her intuitions, which, other things being equal, are perhaps more apt to be right than wrong. She will often "jump" at a correct conclusion with a wonderful degree of promptness and accuracy, which reason would reach with slowness and difficulty, if at all.

There is nothing of intellectuality about the process, so far as we can perceive. If asked for her reasons, she has either none to give, or those she alleges are altogether irrelevant or insufficient. She is in this respect like the East Indian judge, of whom it was said that his decisions on points of law and equity always commanded respect till he gave his reasons for them, and that then they appeared to be ridiculous.

But whether the results of unexplainable mental vision, unconscious cerebration or of some other mysterious psychical process, intuitions often stand a woman in good stead, and are not to be recklessly disregarded by those for whose benefit they are evolved. Valuable as they are, however, in the absence of any better guides, it would scarcely do for the governor of a State to trust to them in the performance of his official acts, the judge on the bench to rely on them in questions of law, or the mathematician to wait for them to appear when engaged in solving a difficult problem.

But there is a peculiar neurotic condition called the hysterical which is ingrafted on the organization of woman, which, so long as it does not pass certain limits, is a normal feature of her being, and which is met with in a greater or less degree in all females of the human species. It is the result of the advanced development of the emotional part of her nervous system, and has existed, at least, since the earliest historical period with women of all nations, of all degrees of civilization and of all varieties of physical and mental traits. It is the cause of all the most charming features of woman's character and disposition, so long as it does not acquire an undue preëminence. But as it is at any moment, and often from slight causes, liable to burst out into unexpected and uncontrollable paroxysms in which all the mental and physical faculties are perverted from their normal course of action and thrown into a condition of the most astounding turbulence, its possession entirely unfits her for emergencies or difficult situations in general. In every woman there is, therefore, a potentiality for irregular, illogical, incongruous, and altogether inharmonious conduct under circumstances which require the utmost degree of presence of mind and discretion. She is in this respect not unlike a package of dynamite, perfectly harmless till some one disturbs the equilibrium of its particles, but then a power, the precise limit of which it is impossible to predict with accuracy.

At all times disposed to judge rather as she feels than as she thinks,—if she thinks at all on the subject at issue,—she is entirely wanting in that type of mental organization known as the “judicial mind.” Abstract justice in a case in which her emotions are involved is an impossibility with her, and however much this peculiarity may dispose those whom she loves, and who profit by it, to condone its exercise, it is one which those who are obnoxious or indifferent to her may well regard with fear and trembling. Her likes and dislikes are paramount with her; the question of right or wrong is a secondary consideration. She will sacrifice her own happiness, her life, and all considerations of duty to others and the public at large for some man whom she loves, and punish with merciless severity those who, though innocent of crime, have desecrated her ideals or have otherwise rendered themselves unpleasant to her. And it is also a notable fact that, in matters submitted to her judgment, in which she may originally have had no personal interest, and which, therefore, she would *a priori* be capable of deciding with impartiality, she becomes biased through some trifling act of kindness or courtesy shown her—a look, a tear will sometimes be sufficient—by one of the parties, and pronounces an opinion at which Justice starts back in dismay. It would not be at all outside of the potentialities for a female judge upon the bench to do all in her power to favor the plausible, handsome, gentlemanly rogue who tenderly cared for his sick mother and lame sister, though evidence as impregnable as Gibraltar showed him to have committed a crime; while the dirty, drunken black-guard and ruffian who cruelly beat his children would go to prison, if she could send him there, for an offense which irrefragable testimony might prove that he could not possibly have committed. Shakespeare, in his portrayal of the character of Portia, shows that he was thoroughly acquainted with the hysterical element as a factor in the mental organization of women. e

The conferring of the franchise upon woman ought, in common justice, to carry with it the right to hold any office for which she might have the privilege of voting. Her sex ought, in such an event, to be no bar to her being a governor, a chief justice, or any other functionary named to office by the people or other appointing power. It is to be hoped, however, that matters will not reach a more advanced point than that to which they have already attained. Nothing could be more

derogatory to the true dignity of woman, or more unfortunate for the human race, than the dragging of her from the honorable position which she now occupies and for which her mental and physical peculiarities so eminently fit her, and the imposition upon her of duties which she could not, in the very nature of things, be expected to perform with efficiency and impartiality. There are many offices the functions of which are of a clerical or other routine character, for which she is admirably qualified, and which, therefore, she could fill with advantage to herself and the public. But those in which force of intellect, a power of disinterested judgment, and enlarged views of public policy are required, must ever continue to be occupied by man. While women remain in the sphere of life for which nature intended them we shall continue to see, as the ages roll on, better women, and, above all, better men to look after the interests of humanity according to their natural and unchangeable powers.

WILLIAM A. HAMMOND.

HENRY GEORGE'S SOCIAL FALLACIES.

THE course of economic discussion during the past few months has taken a wholly unexpected turn. Without any cause existing, so far as one can see, in the economical relations of society, the question of private property in land and of the influence of rent upon the distribution of wealth has been precipitated upon us almost as if it were a new question. Whatever may be true of France or Germany, never in England has the discussion of the equities and the economies of landed property been so active and earnest as now; while in the United States we find a large measure of popular attention bestowed upon a work, the fundamental proposition of which is that "the recognition of exclusive property in land is necessarily a denial of the right of property in the products of labor," and the author of which not only appears as a welcome contributor to the press, but is greeted in crowded public meetings as the apostle of great sociological and economical reforms.

Mr. George's work was published in 1879; but, though it had a ready sale and attracted not a little attention, it created its first sensation when reprinted abroad. In Great Britain, the success of this book has been truly remarkable.

"It is not," says the London "Quarterly Review," "the poor, it is not the seditious only, who have been affected by Mr. George's doctrines. They have received a welcome, which is even more singular, amongst certain sections of the really instructed classes. They have been gravely listened to by a conclave of English clergymen. Scotch ministers and non-conformist professors have done more than listen; they have received them with marked approval; they have even held meetings and given lectures to disseminate them. Finally, certain trained economic thinkers, or men who pass for such, in at least one of our universities, are reported to have said that they see no means of refuting them,

and thus they probably mark the beginning of a new political epoch."

Such a reception could hardly be accorded an American book abroad without awakening new interest and stimulating a wider demand for the work at home. There is no reason to suppose that Mr. George's doctrines have yet deeply infected the public mind of the country; yet the ingenuity and eloquence of the writer must produce no inconsiderable effect upon any reader, however intelligent and however fortified by economic study.

Mr. George's attack on landed property is twofold: from the side of natural rights, and from the side of the economic interests of society. With the former this paper has nothing to do. The appeal to such considerations, in the discussion of such a subject, is either absurd or impertinent, since, if "the social dividend" be increased by the system of private ownership of land, that system stands approved on economic grounds, and the appeal to natural rights involves a manifest absurdity as an appeal against the interests of the party in whose name the appeal is taken; while if, on the contrary, the system diminishes "the social dividend," then is it condemned on economic grounds, and nothing further is needed to establish either the expediency or the equitableness of a return to common ownership. And this subjection of the tenure of the soil to economic principles is not something to which Mr. George will take exception. On the contrary, he claims to write as an economist. Let us, then, proceed to examine his work from this side.

I shall not enter into any discussion of Mr. George's proposition that "Wages are produced by the labor for which they are paid." Were this proposition false, we could concede him all the benefit to be derived from its use, and still disprove the main positions of his work. But the proposition contains much truth, although the author's efforts to disparage the importance of the contributions made to current production by capital accumulated in the past involve a fearful straining of economic facts and economic conditions.

As we said, the proposition that "wages are produced by the labor for which they are paid" contains much truth. So far, however, as the proposition is true, it is not original with Mr. George. Prof. Stanley Jevons, in 1871, announced the doctrine that "the wages of a workingman are ultimately coincident with what he produces, after the deduction of rent, taxes, and

the interest of capital.”* Nor shall I take the reader's time for a discussion of Mr. George's attempted refutation of Malthus's law of population. Here, again, we might concede this writer all he claims, however erroneous, without giving him ground on which to establish the subsequent truly monstrous propositions of this book. There is nothing original in Mr. George's attack upon Malthusianism; and we should use time that might be more profitably employed were we to recite his threadbare arguments. That which is original in Mr. George's work is the enormous power assigned to rent as a factor in the distribution of wealth. Here his admirers may justly claim for him all the credit of first discovery. No other writer, so far as I am aware, ever attributed to rent anything approaching the same degree of importance.

Mr. Mill, weighed down by a sense of the injustice of allowing the large annual increment in the value of land to pass, unearned, to the landlord, proposed, in 1871, that the State should assert the right of the community to this body of wealth; but Mr. Mill never dreamed of advancing the theory that rent tends, in the progress of society, to absorb the entire gain in productive power and even more than the gain.

On the other hand, we have the recent work of M. Leroy Beaulieu, in which that eminent statistician and economist takes the ground that rent, real economic rent—that is, the compensation paid for the use of the natural powers of the earth, considered separately from the return for improvements effected in the soil by capital and labor—has already sunk to a minimum. M. Leroy Beaulieu declares rent to be no more than the merest mole upon the industrial body; Mr. Mill regards it as an open sore, a drain upon the vitality of the State, which should be checked by stringent surgery and cautery; Mr. George looks upon rent as a cancerous evil, which, growing by what it feeds upon, draws into itself, more and more, the vital forces of the community, extending its deadly influence further every day, and drawing ever nearer to the seat of life.

Reduce rent, as an element in the distribution of wealth, to

* In the pages of this REVIEW, in January, 1875, I laid down the following proposition: “Wages are really paid out of the product of current industry; and that product bears no constant relation to capital. Capital only affects wages as it first affects production. Wages, therefore, stand related to product in the first degree, and to capital only in the second degree.”

the importance assigned it by Mr. Mill, and Mr. George's work would be emptied of all original significance. It would remain no more than a passionate tract, in advocacy of the proposals put forth for the nationalizing of the land by the British Land Tenure Reform Association, of which Mr. Mill was president, twelve years ago. Here, then, right here, in the highly magnified importance assigned to rent, we find all there is of Mr. George's work which has originality or novelty. Let us, therefore, confine ourselves strictly to this point.

In the first place, I remark, negatively, that Mr. George does not attack property in general. He does not rail at capital or impeach its claim to recompense. On the contrary, it is a part of the charge he brings against rent, that it tends more and more to absorb the rightful gains of capital as well as of labor. In the second place, Mr. George is not an opponent of the Ricardian doctrine concerning rent. The law of rent is, he says, "correctly apprehended by the current political economy." Indeed, so far is Mr. George from being an opponent of the Ricardian law, it is in the unheard of extension which he gives to this principle that the essence of his teaching consists.

Let us now proceed to state Mr. George's position affirmatively. As we have agreed, for the purpose of the present discussion, to concede the sufficiency of his arguments in refutation of the doctrine of Malthus, we will, for simplicity, follow Mr. George only in his analysis of the effect of rent acting upon a stationary population.

What, then, fundamentally, is his position? "Irrespective," he says, "of the increase of population, the effect of improvements in methods of production and exchange is to increase rent." The proof of this is as follows, in his own words:

"Demand is not a fixed quantity that increases only as population increases. In each individual it rises with his power of getting the things demanded. . . . This being the case, the effect of labor-saving improvements will be to increase the production of wealth. Now, for the production of wealth, two things are required,—labor and land. Therefore, the effect of labor-saving improvements will be to extend the demand for land. . . . And thus, while the primary effect of labor-saving improvements is to increase the power of labor, the secondary effect is to extend cultivation, and, where this lowers the margin of cultivation, to increase rent.

"Thus, where land is entirely appropriated, as in England, or where it is either appropriated or is capable of appropriation as rapidly as it is needed for use, as in the United States, the ultimate effect of labor-saving machinery or improvements is to increase rent without increasing wages or interest."

And he concludes, after frequently repeating and illustrating this statement, with the following proposition :

"Wealth, in all its forms, being the product of labor applied to land, or the products of land, any increase in the power of labor, the demand for wealth being unsatisfied, will be utilized in procuring more wealth, and thus increase the demand for land."

He says further :

"The mere laborer has thus no more interest in the general advance of productive power than the Cuban slave has in advance in the price of sugar. And just as an advance in the price of sugar may make the condition of the slave worse, by inducing the master to drive him harder, so may the condition of the free laborer be positively, as well as relatively, changed for the worse by the increase in the productive power of his labor. For, begotten of the continuous advance of rents, arises a speculative tendency which discounts the effect of future improvements by a still further advance of rent."

The last sentence will introduce to the reader Mr. George's second count in his arraignment of rent as the great social criminal :

"In rapidly progressing communities, where the swift and steady increase of rent gives confidence to calculations of further increase, . . . the confident expectation of increased prices produces, to a greater or less extent, the effects of a combination among land-holders, and tends to the withholding of land from use in expectation of higher prices, thus forcing the margin in cultivation farther than required by the necessities of production."

But this is not the end. The third and final count in this indictment is, that the speculative holding of land becomes the cause of incessant industrial disturbance and of great periodic convulsions of production and trade.

"The primary and fundamental occupations, which create a demand for all others, are evidently those which extract wealth from nature, and hence, if we trace from one exchange point to another, and from one occupation to another, this check to production, which shows itself in decreased purchasing power, we must ultimately find it in some obstacle which checks labor in expending itself on land. And that obstacle, it is clear, is the speculative advance in rent, or the value of land, which produces the same effects as (in fact, it is) a lock-out of labor and capital by land-owners. This check to production, beginning at the basis of interlaced industry, propagates itself from exchange point to exchange point, cessation of supply becoming failure of demand, until, so to speak, the whole machine is thrown out of gear, and the spectacle is everywhere presented of labor going to waste, while laborers suffer from want."

This concludes Mr. George's arraignment of private property in land. It is upon what has been already presented, mainly in his own words, that Mr. George is to stand or fall as an economist.

It must be confessed that, if the three counts in this indictment be sustained, the author is fully borne out in his conclusion that "material progress does not merely fail to relieve poverty; it actually produces it," or, as he elsewhere says, "whatever the increase of productive power, rent steadily tends to swallow up the gain and more than the gain," or, again, "the ownership of the land on which and from which a man must live is virtually the ownership of the man himself, and, in acknowledging the right of some individuals to the exclusive use and enjoyment of the earth, we condemn other individuals to slavery as fully and completely as though we had formally made them chattels."

To a man who really believed a half, a quarter, or only a tithe of this, the conclusion which Mr. George announces at the close of the following paragraph would appear inevitable :

"As long as this institution exists, no increase in productive power can permanently benefit the masses, but, on the contrary, must tend to still further depress their condition. . . . Poverty deepens as wealth increases, and wages are forced down while productive power grows, because land, which is the source of all wealth and the field of all labor, is monopolized. To extirpate poverty, to make wages what justice demands they should be, the full earnings of the laborer, we must, therefore, substitute for the individual ownership of land a common ownership."

We cannot be greatly interested in Mr. George's practical recommendations for carrying out his proposals for "nationalizing" the land. Matters of this sort are generally left to statesmen, not to economists; and should ever the abolition of private property be decreed, there is little reason to hope that Mr. George would be called in to adjust the details of the scheme.

But let us proceed to inquire somewhat particularly into the validity of the economic argument by which Mr. George establishes the overwhelming importance which he attributes to rent as a factor in the distribution of wealth. If it can be made to appear that this argument embodies a series of gigantic blunders, shall we not be justified in affixing to his work the epithet of the "Edinburgh Review"—"a deleterious compound of anarchical principles and false political economy"?

I will not insist very strongly on the point, although a per-

fectly valid one, that, while Mr. George's argument assumes that maximum economic rents, according to the Ricardian formula, are in all cases paid for the use of land, the contrary is the general fact. The United States and Ireland are, perhaps, the only considerable civilized countries in which "competition" rents have ever been paid, as a rule.

But passing this point, although it is of unimpeachable validity, since the entire effect of the causes indicated is to reduce the importance of economic, or competitive, rent in the distribution of wealth, let us take up, in reversed order, Mr. George's three counts against rent as the great social criminal.

And, first, how much is there in the allegation that commercial disturbance and industrial depression are due chiefly to the speculative holding of land ?

That land, in its own degree, shares with other species of property in the speculative impulses of exchange, is undeniable. Doubtless, to destroy private property would remove speculation, just as cutting off the head is a sure and sovereign remedy for toothache; but Mr. George makes no point against private property in land, unless he shows that it is peculiarly the subject of speculative impulses. Now, this is so far from being either self-evident or established by an adequate induction, that the reverse is the general opinion of economic writers.

Probably the best case of speculation, for what may be called nosological economic investigation, is that induced by a large and sudden paper-money inflation. Here we get speculation in its purest form. Now, the history of paper-money inflations indicates that land, instead of rising first and furthest of all species of property, usually starts latest and stops earliest.

Of course there are circumstances under which speculative impulses may especially attack land. An instance of this is afforded by the history of land in California. Here was a community of a highly artificial character, having little normal trade or manufactures, whose chief industry, the mining of the precious metals, was already rapidly on the wane, when the opening of the transcontinental railway aroused the most extravagant expectations of a rise in the value of land. San Francisco was to control the trade of America and Asia; the wealth of continents was to be poured into her lap. A wild career of land speculation followed. Mr. George, as a resident of San Francisco, appears to have been completely carried away by his

observation of this episode. What was local and accidental he has magnified into a universal and characteristic feature of speculation.

We now come to Mr. George's second count. The allegation that the enhancement of the value of land, above what should be regarded as the capitalized value of its present productive or income-yielding power, withdraws large bodies of land from cultivation, thus driving labor and capital to poorer or more distant soils, can only be characterized as a baseless assumption, for which not a particle of proper statistical evidence can be adduced, and which is contrary to the reason of the case.

Because, forsooth, a man is holding a tract of land in the hope of a rise in its value, does that constitute any reason why he should refuse to rent it this year or next, and get from it what he can, were it only enough to pay his taxes?

Doubtless, a certain amount of urban property is so withheld from present use, yet any one familiar with the city in which he lives can readily pick out hundreds, or thousands, of lots which are now occupied by cheap and temporary structures, whose rent pays the taxes and a part at least of the interest of the money borrowed for the purpose of holding the property.

Let us now proceed to deal with Mr. George's main proposition, that to which those already discussed are subsidiary; that which constitutes the most original feature of his system—the proposition, to wit, that “irrespective of the increase of population, the effect of improvements in methods of production and exchange is to increase rent,” this effect being carried so far that “all the advantages gained by the march of progress go to the owners of land, and wages do not increase,” the laborer having “no more interest in the general advance of productive power than the Cuban slave has in advance in the price of sugar”; capital, also, in its turn, suffering, and to an equal extent, since “the ultimate effect of labor-saving machinery or improvements is to increase rent without increasing wages or interest.”

Now, this is not only false, but ridiculously false, blunder being piled on blunder to reach a conclusion so monstrous. It is, to start with, directly opposed to facts of common observation and to the results of economic statistics. Were a physiologist to announce the general proposition that all a man gains in weight above one hundred and fifty pounds goes to increase the brain, so that if a man of that weight has a brain weighing

forty-eight ounces, a man turning the scale at one hundred and eighty pounds will be found to have a brain weighing thirty-three pounds, he would not invoke more deserved derision.

And, first, of wages: Sir James Caird, the highest authority in Great Britain in matters of agricultural economy, states that "the laborer's earning power in procuring the staff of life cost him five days' work to pay for a bushel of wheat in 1770; four days in 1840, and two and a half days in 1870." Sir James adds, "He is better lodged than he ever was before."

But Mr. George also asserts that the capitalist has suffered equally under the encroachments of the landlord. To this no better answer can be given than that of Prof. Emile de Laveleye: "Who occupy the pretty houses and villas which are springing up in every direction in all prosperous towns? Certainly more than two-thirds of these occupants are fresh capitalists. The value of capital engaged in industrial enterprise exceeds that of land itself, and its power of accumulation is far greater than that of ground rents."

So much for facts of common observation. But now let us examine Mr. George's line of reasoning directly.

"The effect," he says, "of labor-saving machinery will be to increase the production of wealth. Now, for the production of wealth two things are needed,—labor and land. Therefore, the effect of labor-saving improvements* will be to extend the demand for land." But not, also, for labor? If two things are required for production, land and labor, is it not possible that an increase of production may involve an enhanced demand for both these things, for labor no less than for land? But this is Pelion; Ossa lies groaning beneath. For it is not true that an increased production of wealth necessarily implies any enhanced demand for land whatsoever.

Here is a pound of cotton, the production of which makes a certain demand or drain upon the land. To that cotton, as the material of a textile fabric, may be applied, say, the labor of one operative for half an hour. Subsequent demands for the production of wealth may lead to the application of an hour's labor, producing a finer fabric; then, of two hours' labor, until, at last, the pound of cotton has been wrought into the most exqui-

* Mr. George elsewhere says: "In the improvements which advance rent are not only to be included the improvements which directly increase productive power, but also such improvements in government, manners, and morals as indirectly increase it."

site product of the modern loom, yet with no greater demand upon the soil than in the case of the coarsest cloth.

But we may go further and assert that in the progress of civilization, which Mr. George describes as venting its whole economic force in causing a rise of rents, increase of production takes two great forms: one in which no increase whatever in the demand for land is involved; the other, where the increased demand for land falls short, generally far short, often immeasurably short, of the increased demand for labor.

Here is the rude furniture of a laborer's cottage, worth, perhaps, thirty dollars. The same amount of wood may be wrought into cabinets and tables, worth a thousand dollars, for the drawing-room of the millionaire. The steel that would be needed to make a scythe, worth eighty cents, may be rendered into watch-springs or surgical instruments, worth a hundred dollars. The actual material derived from the soil—canvas, paints, and frame—for a picture by Meissonier, seven inches by nine, worth ten thousand dollars, does not make so large a draft upon the productive essences of the soil as a chromo sold from a peddler's cart at two dollars. The peddler's old piebald horse eats as much of the actual produce of the earth as a blooded racer worth five thousand dollars.

These, of course, are extreme instances, taken for the purpose of showing graphically and briefly the tendency which exists, as civilization advances, to increase the amount of labor applied to any given amount of raw material.

But worse respecting Mr. George still remains. Let us no longer hold him accountable for the absurd proposition that all the advantages of increased production go to the land-owner, rent absorbing the entire excess, leaving nothing to go to enhance wages or to interest. Let us, in charity, concede that Mr. George never said this, and take up, finally, for consideration the proposition that it is the necessary effect* of improvements in the methods of production or exchange to increase rent at all. If we can disprove this, if we can show that Mr. George has rigged

*I trust I shall not be understood as denying that it is the effect of many classes of improvements, irrespective of increase of population, to enhance rent, though this is never carried to the full extent of the gain in productive power. Of course, where increase of population follows, rent rises naturally; but we are discussing Mr. George's distinct proposition, that, "irrespective of increase of population," it is the effect of every class of improvements, from whatever source, even through improvement in morals and social order, to enhance rent.

his pumps the wrong way, like the officers of the French steamship *L'Amérique*, who pumped water into the hold of their vessel for a whole day and then abandoned her in a sinking condition, we may fairly conclude that the world has nothing to learn from this writer concerning the economics of rent.

Let us take two great classes of improvements: these will suffice to test the principle. And, first, of improvements in transportation. Is it the effect of improvements of this class to enhance rents? Absolutely and exclusively, the reverse. Whatever quickens and cheapens transportation acts directly to the reduction of rents, and cannot act in any other way,* since it throws out of cultivation the poorer lands previously in use for the supply of the market, thus raising the "margin of cultivation," and, by consequence, reducing rents. It is this cause, intensifying American competition, which has brought about such a terrific reduction of English rents within the past five or ten years.

But again, take the case of agricultural improvements. Improved processes of agriculture are of two kinds: one consisting of those which do not increase the amount of produce from a given tract of land, but diminish the labor and expense of obtaining it, such as better tools and machinery; the other, consisting of those which enable the same land to yield a greater absolute produce without an equivalent increase of labor, such as rotation of crops, subsoil plowing, tile-draining, etc.

Now, of these two classes, the former diminish rent; the latter diminish it still more. The former diminish it, since while by Ricardo's law—which Mr. George accepts in its entirety and integrity—the actual amount of the produce going to the landlord remains the same, the value of this produce, its power to command non-agricultural products, is diminished through the reduced cost of production. The latter class of improvements diminish rents still more, since, in addition to the effect just noted, the amount of the produce going to the landlord is reduced by the fact that the actual productive capability of the better lands being by the statement of the case enhanced, the poorer lands will be thrown out of cultivation, and thus the "margin of cultivation" will be raised, and the aggregate volume of rents will be diminished.

FRANCIS A. WALKER.

* "Irrespective of the increase of population," to use Mr. George's own voluntary qualification.

CRUDE METHODS OF LEGISLATION.

THERE are in active operation in the United States one National, thirty-eight State, and eight Territorial law factories, which, aside from the Municipal legislative bodies, are producing during several months in each year new laws, printed in annual or biennial volumes of many pages. In the more densely populated and richer States of the Union, the annual coming together of the law-making power is regarded with apprehension, and its adjournment is followed by a feeling of relief on the part of those members of the community who do not actively engage in politics and who pay the taxes. Year after year has this abnormal state of feeling been voiced by the press with such similarity of expression, that custom has staled speculation on the situation, which has come to be looked upon as one of the evils of our environment, such as possible frosts in early June, that may destroy the fruit crop, or a drought, that may diminish the product of cereals. This want of confidence in our law factories does not arise merely from apprehension of the evils of inaction, but from the fear of their too mischievous activity. It is not the amount paid to the legislators in the way of salary that in the least awakens the alarm of citizens. It is the product which they create—their “output”—which gives rise to the liveliest misgivings on the part of the persons who consciously bear the public burdens, and who are the very men called upon to maintain the toilers whose combined labor is by them viewed with so much of distrust; in short, the tax-payer is called upon to maintain and support law factories, the product of which, as a whole, he regards either as useless or dangerous.

A community tolerates the existence of powder mills, notwithstanding their dangerous character, because their product is necessary for national defense, for industrial purposes, for

mining operations, and for the sportsman. The benefits of the use of powder compensate, if such things may be compared, many thousand-fold for the evils endured. It would be folly, indeed, on the part of the community, were it to permit powder mills to be erected, if the danger and mischief of the results exceeded the advantages to be derived therefrom. It can scarcely be controverted that nine out of ten capitalists of the country would, if questioned, assert their belief that the legislatures annually do more harm than good at their sessions. As legislation is in its essence the highest, and should be the most beneficial, product of human effort, this state of facts is in itself evidence of a radically defective system of law production.

During the last days of its this year's session, two measures were before the Legislature of New York which curiously illustrate the remarkable condition of legislation in the United States. One was what was known as the "Aqueduct Bill," and the other was known as the "Pilotage Bill." The citizens of New York, at a public meeting and through the public press, said in most emphatic terms to the Legislature, that they preferred to wait another year for the initiatory steps to create a new aqueduct, rather than trust politicians with the building of it. Unless the measure placed the control of the expenditures in hands other than those of local politicians, in whom no confidence could be placed, New Yorkers were quite willing to suffer a little longer from an insufficient supply of water. Nevertheless, the Legislature passed the bill in an objectionable form, in order that "the boys" (the workers in politics) might get their fill of patronage and plunder.

The passage of the second bill, the Pilotage Bill, was urged by the Chamber of Commerce of New York, as a measure of relief from the excessive pilotage charges of the port of New York. This bill was advocated by all the interests which the Legislature was supposed to be called upon to serve, but it failed of passage. At a meeting of the Chamber of Commerce, after such failure was announced, Mr. Higgins, one of its members, said: "They sit there at Albany and simply laugh at us. They treat us with contempt and ignore our reasonable requests. Our liberties are fast being taken away from us by those politicians at Albany."

Is it not curious that the means which Americans have of reaching their legislative bodies after they are convened, and

compelling them to do their bidding, is not much in advance of the methods of influencing legislation adopted by the subjects of the so-called "effete monarchies" of Europe when they desire to protest against or to forward a measure that may be before the council chamber or legislative body advisory to the king? In monarchies of a constitutional character, subjects may hold meetings to indicate public opinion, and to give intimation of punishment should public opinion be disregarded. The emperor and the Reichstag, or the king and Parliament (if the measure be one for the benefit of the governing body and against the interest of the general public), will consider the question how far public opinion is aroused and what risk is run, if any, by braving it. If they conclude that the risk is not very great, they pursue the even tenor of their way and disregard the demand. If, on the other hand, they conclude that disregard of the intimation may involve a loss of power, they will probably comply. In either event, it is a demonstration of force, depending for its success upon the estimate made by the Government of the amount of reserve power behind the demonstration. From this it would appear that in the United States, as in Europe, the Government is one thing and the people another. Viewed from the stand-point of constitutional history, the people and the Government are one, but institutionally a very great antagonism exists between governed and governors. In this country, the gap is not so wide as in some others, but it nevertheless exists, otherwise harbor-masters' bills would be passed without the necessity of pressure on the part of the Chamber of Commerce, and aqueduct bills would be passed without danger of their being manipulated in the interest of politicians. That the wishes and the interests of the people are not regarded, but that, on the contrary, the politicians are banded together under different names, as a guild of craftsmen, against the interests of the people, is indicated by the fact stated at the outset of this article, that in almost every State of the Union where large interests are at stake, the convening of the Legislature is regarded with alarm, and its date of adjournment marked as a red-letter day in the calendar of the year.

Now let us seek a little further for the cause of this antagonism and the means of its removal. One of the causes is doubtless to be found in the all but universal adoption of a vicious system of representation, by which American communities are

subdivided into geographical constituencies, each constituency being represented by a single member, elected by the majority of the electors in the district. This system is the source of the party machinery which is brought to a greater degree of completeness in the United States than elsewhere, and which brings with it all the evil elements of party tyranny. The substitution of a minority or personal system of representation for the geographical or district system would go far toward remodeling the personnel of legislatures, by substituting intellectual for geographical constituencies. The main difficulty, however, lies in the fact that improvements in legislative machinery have not kept pace in the United States with the financial and industrial development of the country. The great development of corporate wealth, and the almost infinite division of employments which the application of steam to industrial pursuits has created, bring upon the legislative bodies of every State having diversified industries and a considerable proportion of its wealth invested in corporate enterprises, a very strong pressure for special and local legislation to meet cases not provided for or not anticipated by the general law. In modern times, this pressure upon the legislative and administrative machinery of every community has been differently withstood in different countries. That under this pressure the antiquated machinery of legislation, adapted to the colonial days when industries were few, capital sparse, and the community homogeneous, constantly breaks down when used for modern legislative purposes, is not at all surprising. It would be wonderful if it did not break down. In modern engineering, when railway trains are to be carried across streams, railway bridges are built adequate to sustain them, and no attempt is made, from a reverential regard for the wisdom of the forefathers, to use bridges built by them for carrying a gig or a market-wagon. The remedy for many of the evils of mischievous legislation lies in improving legislation by the application of scientific methods so as to keep it abreast of the age. No legislative body can, in the present diversified and conflicting condition of individual interests, perform its duty, unless some other method than that which has prevailed in the United States is adopted, by which it may be informed as to the interests which call for legislation, and the effect such legislation will have upon those concerned. There is now practically no provision for giving notice to the community of

intended changes in the law and for gathering information, while the Legislature is in session, of their possible or probable effects.

General laws should be the offspring of the Government as represented by the party in power, and should be carefully prepared before the convening of the legislative body by thoroughly competent jurists, under the direction of statesmen specially charged with the responsibility of legislation. To accomplish this end, it will be necessary to create in each State an organization somewhat similar to a Cabinet, to prepare public bills in advance of the session. For the performance of that function, the existing political State organizations are woefully defective as to general legislation. Even the Cabinet of the United States is a Cabinet of administrative officers, who do not consider themselves charged with the duty of preparing legislative measures for the session, and whose attempt to do so would be regarded as an intrusion; and in the several States there is nothing in existence even remotely analogous to the English Ministry.

The political party in power, having no legislative organism as to general public law through which it can be held responsible for the legislation of the session, throws the blame of slipshod work on the Legislature, and as that body dissolves at the end of the year, there is no responsibility of practical value. The public legislation of the States of the Union is, therefore, wholly dependent for its substance and form upon the somewhat personal or private interests which suggest the framing of a public law, and upon the accidental ability of members of the Judiciary Committee, who, even when competent, are compelled to work under a pressure inconsistent with the attainment of scientific results.

As to private and local legislation, the condition is still worse. The people of this country have wholly failed to draw the logical distinction between private or local legislation and public legislation. The Roman distinction between general law and *privilegia*, or *constitutiones personales*, has been obliterated. The latter do not, properly speaking, come under the head of legislation at all, but are in the nature of an immunity granted by the sovereign power from the operation of general law, or of a special privilege which is not generally conferred by law. Private and local bills, therefore, are in substance, and in their

essential elements, judgments or decrees emanating directly from the sovereign power instead of intermediately from judges. They, however, partake of a judicial character. Says Sir Erskine May, in his book on "Parliamentary Procedure": "Parliament regards such laws as judicial proceedings, wherein persons whose private interests are to be protected appear as suitors for the bill, while those who apprehend injury therefrom are admitted as adverse parties in that suit."

The distinction, according to English ideas, between a public bill and a private bill is so fundamental that over the signature of the Queen to a public bill is used the expression "*la reyne le veult*"—it is the Queen's wish; to a private bill it is "*soit fait comme il est désiré*"—be it ordered as prayed for. It was only after the separation of the American colonies from England that the pressure of private interests for legislation and the evils of lobbying for the promotion of special interests arose. Our statesmen thought they were following English precedent in indiscriminately granting legislative powers, both in public and private affairs, to the legislative bodies of the several States. But it was forgotten that Parliament was the appellate court of last resort, and therefore used in private legislation judicial as well as legislative methods. It thus was able to surround its special legislation with certain safeguards, by enacting it under judicial forms, which gathered and sifted as far as possible all attainable information for the guidance of the legislator, and gave to adverse interests an opportunity to be heard by trained counsel in furtherance of and in opposition to a proposed private bill. Hence, even prior to the adoption of the Standing Orders, no great mischief was done in England by private legislation. In the United States, on the other hand, this power of special legislation was intrusted to the hands of inferior men, just at the time when the differentiation of employments, making private occupation more attractive than governmental employment, by the allurements of greater gain, caused the withdrawal from the public service of the most alert and intelligent members of the community. At the same time, a growth of corporate activities of great magnitude was developed from the very small germ which had existed in the eighteenth century. In the first half of the nineteenth century this growing power gradually took possession of, and to a certain degree controlled, the supply of commodities, the production of which had been greatly facilitated

by labor-saving machinery. The most useful and profitable of these occupations were of such great magnitude and risk that they could not be carried on at individual expense, and were possible only to the capital to be gathered together under corporate management, with limited liability. The progress of invention was at the same time fast making the business of constructing highways and transporting goods thereon a private corporate function instead of a governmental function, and the growth of wealth was very much in excess of the development of refinement, self-restraint, and public virtue. These causes developed the lobby, which made its appearance in England with an activity a little more disguised, and with manifestations of corruption a little less glaring and vulgar, than in the United States. Francis, in his "History of the Railway," says: "Members of the House of Commons were personally canvassed, solicitations were made to peers, influences of the most delicate nature were used, promises were given to vote for special lines before the arguments were heard, advantages in all forms and phases were proposed to suit the circumstances of some and the temper of others. Letters of allotment were tempting, human nature was frail, and the premium on five hundred shares irresistible."

The demand for private legislation, notwithstanding the fact that in England public bills have a sort of royal right of way to which private legislation must yield precedence, began to press seriously on public legislation and materially to interfere with the public duties of Parliament and the administration of the empire. Therefore, in 1847, a code was adopted known by the name of the Standing Orders, which, together with the acts establishing the Royal Gazettes and notices of publication therein, created a very complete system of practice in relation to private bills. The provisions thereby made for securing the rights of parties applying for, and of parties resisting special legislation, are as well adapted to secure their end of preventing injustice by legislation, as are the codes of practice and rules of pleading and procedure which prevail in courts of law to prevent unjust transfers of property through judgments and decrees.

Thenceforth, in England, a bill not of a public and general nature was placed, in practice as well as in theory, upon a footing entirely different from that of a public bill, and was treated as a claim by an applicant for legislation as against the whole community, which was to be tried as though it were a demand against the people at large for so much money.

All bills of a private or local character are divided into two classes. One of these embraces all bills which involve enlargements of powers of corporations or changes of acts incorporating public bodies or municipalities, which bills or amendments do not involve the exercise of the power of eminent domain. The other class embraces all bills which do involve the exercise of that sovereign power. These two classes embrace substantially the whole field of private and special legislation. Petitions for private bills, with copies of the proposed bills, must be deposited in the private bills office of the House of Commons about six weeks before the assembling of Parliament. In the case of bills of the second class, a plan of the work and a list of all owners along the whole line of the work whose interest may be affected or whose property is to be taken must accompany the petition, and notice of such petition and proposed bill must be published in the official gazettes and personal notice served on all persons whose land is to be taken *in invitum*, should the bill become a law. There are many other modes of procedure to be observed which, with few exceptions, need not be here noticed. If the bill is one which affects interests over which the Board of Trade exercises jurisdiction, such as canals, railways, or turnpikes, a copy of it must, in advance of the session, be lodged with the Board of Trade.

When the time has expired for depositing documents, opponents to the bills can, on examination determine whether the Standing Orders have been complied with. Should it appear that the Standing Orders have not been complied with, they may present and file in the same office counter-memorials of such non-compliance before the meeting of the officers, called examiners, whose business it is to determine whether the conditions preliminary to having the bill considered by the legislative body have been fulfilled. One of the examiners is appointed by the Speaker and the other by the House of Lords. They meet about a fortnight before the convening of Parliament. Notice is thereupon sent to the parliamentary agent who indorsed the petition, and to such as have in behalf of clients filed preliminary objections on the ground of non-compliance with Standing Orders, and on this preliminary issue a trial is had on these questions of practice only. When the petition and bills have passed this scrutiny,—to which unopposed bills, as well as those which are opposed, are subjected,—objections may be filed to the petition and clauses of the bills, which are thereupon introduced into the

House of Commons or House of Lords. If it has been decided that the Standing Orders have not been complied with, and the parliamentary agent claims that there is reasonable excuse for non-compliance, the case can be referred to the committee of nine members on Standing Orders, who may, by report, overrule the examiners and recommend indulgence; but the cases are rare when such non-compliance is excused and the bill considered.

The bills which have passed this scrutiny are thereupon referred to the respective committees of the House of Commons, who proceed to divide them into two classes, one class comprising unopposed, and the other opposed bills. Those that are unopposed are, if they belong to the more important class of private bills embracing the exercise of the right of eminent domain, referred to the chairman of committees of the House of Lords, and also to the Board of Trade, to suggest amendments and to act as scrutinizers and critics of the powers intended to be granted. Lord Redesdale, who has been for many years chairman of committees of the House of Lords, exercises almost despotic power over private bills. His suggestion and amendments, aided as he is by the Speaker's counsel, in addition to his own counsel, are incorporated in the bill almost, as of course, as his long experience and high character as legislator and jurist make his opinion on a private bill authoritative with the House of Commons Committee. Even when the bill is unopposed, it is, after its reference to committee, considered in the presence of the parliamentary counsel, who in the parliamentary part of the proceedings stands in the same relation to the agent that the barrister stands to the solicitor in the courts of law; and in certain cases, as already observed, every bill on subjects under the cognizance of the Board of Trade is opposed by it so as to cut down any unnecessary or dangerous clause granting additional powers.

Opposed bills, except railway and canal bills, go to the Committee of Selection, composed of the chairman of the Standing Orders Committee and four members nominated by the House at the commencement of every session. This committee classifies all private bills, nominates the chairman and members of these committees on such bills, and arranges the time of their sitting and the bills to be considered by them. Railway and canal bills go directly to the General Committee on Railways and

Canals. The first business of these committees is to form bills which come before them into groups and appoint sub-committees for their consideration, of which the chairman only is a member of the appointing committee.

These sub-committees are composed of a chairman and four members of the House and a referee, not a member, who is generally an expert on the subject-matters of the bills. Calendars are then prepared by the committees, and thenceforth, until the report, the bills and the opposition thereto are tried in the same manner and under like forms as a controversy before a court of law. All the formalities of a court of justice are maintained. If the promoters of a bill fail to sustain it during its progress, it is abandoned by the House in which it is pending, however sensible the members of the House may be of its value.

So completely is a private bill regarded by courts of equity in the light of an ordinary suit, that its promoters have been restrained by injunction from proceeding with a bill the object of which would, in effect, set aside a contract made by the promoters. Unopposed bills are referred to the chairman of the Ways and Means Committee of the House and the chairman of committees of the Lords, and at any time either of these chairmen can recommend that an unopposed bill shall be treated as an opposed bill, and thereupon it is to be proved before the appropriate committee as though a memorial had been presented against its clauses by an adverse interest. A complete fee bill provides for the expenses of all private and local bills through all the parliamentary stages. The charge borne by every bill before it becomes law for the payment of examiners, referees, counsel, and committee work, varies from five to fifteen hundred dollars. This charge is independent of the fees paid to parliamentary agents, counsel, and witnesses; and in addition to all these charges, the claimant for local or private legislation may be mulcted in a heavy bill of costs to adverse parties who prevail in defeating the bill, or so amending it as to secure rights which had been inadequately protected by the draft bill.

Private bills legislation is not only not a burden upon the public under this system, but is a source of revenue. All the expenses of a parliamentary session are in effect borne by the applicants for private and local legislation. By the adoption of this system, method and order have been introduced into the business of legislation. Parliament has thereby created a ma-

chinery by which, whenever special legislation is applied for, it is informed of all private as well as public interests to be affected by such legislation, and it thereby puts itself in a position intellectually to cope with the intelligence developed by the differentiation and division of employments. It has not only improved its law products, but has also cast out the evils which beset that species of law-making, and substituted a learned profession — the parliamentary bar — in the place of irresponsible and corrupt lobbyists. The people of the United States, on the other hand, by adhering to methods applicable to the primitive condition of a nation of planters and farmers, with simple wants, little credit, and a low industrial status, have drifted into a position as to their legislation not only out of all harmony but in sharp conflict with their industrial and commercial development.

England, by adopting this course of bringing method into its legislation, has accomplished three distinct and important results. In the first place, it has prevented the possibility of smuggling a private or local bill through the Houses of Parliament. Without adequate and complete notice to interests which might be adversely affected by it, such a bill cannot even be introduced. Secondly, it has imposed the work and the expense of special legislation upon the parties who seek it, and made every possible provision that no injury should be done by the granting of the special law. Thirdly, it has ridden itself of the lobby. When the grant by special legislation went no longer by favor but by merit, and when the vote of the legislator could no longer be won by underhand means, the class of men who theretofore had been serviceable in the lobby of the House of Commons could no longer be made useful; and a trial requiring trained intellects being the condition precedent to a grant of power, the parliamentary lawyer took the place of the lobbyist. In short, there is as great a distinction between the men who now promote private and special legislation in England and the men who promoted it before the existence of the Standing Orders, as there is between a lawyer who argues a cause before a common law tribunal of dignity and the go-between of a Turkish court to fix the judge in a suitor's behalf by a propitiatory gift.

The American people are not slow in their perceptions, and have, therefore, not been oblivious of the evils incident to the present system of legislation; but they are a busy people, and are, therefore, too impatient carefully to study out the remedy.

Palliatives in statecraft are the things most likely to attract them, because the reasoning that leads to their acceptance lies upon the surface. It is therefore not surprising that the constitutional amendments which have been adopted in many States, and which are, more or less, in process of adoption in many others, to reach this evil, should be of the nature of palliatives. Palliatives, however, simply act upon the symptoms of a disease, leaving the source of it in full activity; resort to them is, therefore, likely in the end to prove more injurious than if they had never been applied. So will it, in all probability, be with the attempted remedial measures that have captured the public ear and are advertised as infallibly curative of the disease of bad legislation.

One measure of this class is the constitutional limitation upon the power of the legislatures to pass special and local laws in a large number of enumerated cases, and requiring that the legislation upon such subjects shall be by general law. As these cases embrace the main field of special and local laws, such constitutional provisions have for their inevitable effect, that the pressure for special immunity from the operation of the general law or for special privileges will hereafter more extensively cause, and, to a considerable degree, has already caused, great and harmful changes in the general body of the law. Thenceforth personal and not general interests operate to change and modify the *corpus juris* of the State. Special and local legislation is thereby not diminished, but re-appears in its most dangerous form, *i. e.*, special legislation disguised as general laws. So that now, within less than ten years after the adoption of this constitutional amendment in the State of New York in 1874, no lawyer feels safe, without a critical examination of the annual statutes, to give an opinion as to the general body of the law, which had previously been regarded as well settled, as he cannot tell how the Legislature may have been induced to change the well-established law for the purpose of meeting a special case. More particularly is this tendency a dangerous one in a community like that of the State of New York, where there is no direct responsibility for the public law-making of a session except with a Legislature which has ceased to exist when the law is published in accessible form. No ministry is responsible for the laws of the year, and, excepting the veto, the only safeguard that exists against mischievous legislation of

this character slipping through from year to year, is in the alertness of the judicial committees of the two branches of the Legislature, who are overtaxed with work and not overburdened with knowledge.

The second remedy of the palliative order is to have the Legislature meet less often. Biennial sessions have therefore been proposed, and in some States adopted. The argument which supports the reduction of the activity of the Legislature by one-half is a captivating one to a community which regards with dread any meeting of its legislative body; yet a little reflection will show how utterly ineffective this proposed remedy will be. The legislative body can commit as great a sum-total of mischief, when convened but once in two years, as it now does when convened every year. And the mischief is sure to be greater, for the reason that when the Legislature meets but once in two years, the number of bills which will be crowded upon it is sure to be larger than when it meets annually. Already, under the present unorganized habit of legislation, the individual members of the Legislature cannot acquaint themselves properly with the merits of any proposed law, for want of time and of judicial machinery. With the inevitable result of being more occupied when it does meet, the evils that must result from ignorance alone will therefore be considerably increased when the Legislature meets less often.

An illustration used by the writer on a former occasion may do service once more. Would not a man have run serious risk of being regarded as an imbecile had he proposed, in 1871, as a remedy for Judges Barnard and McCunn's mischievous activity on the bench, that they should sit but half the year instead of during the whole year? So long as there was no limitation put upon the amount of the mischief that they were enabled to do within the given time, it is clearly obvious that by limiting the time the mischief is not diminished. So, while this remedy is useless for good, it is fraught with the special disadvantage that evils which the Legislature alone can restrain must go unredressed for several years to await the coming together of the law-makers.

It must be admitted that a reform, like the one proposed, of methodizing our legislation, is not easy of accomplishment. The mere adoption of Standing Orders or rules would bind no legislative body any longer than its will would see fit to be

bound by them, and they would clearly not be binding upon a subsequent Legislature. It would, therefore, be necessary to embody the principles of such a reform in the State constitutions, and require the Legislature to enact rules for methodizing its work and carrying on its business according to some formula contained in the fundamental law of the people. The necessity for such a reform need scarcely be further urged. The writer of these pages, during a session of the British Parliament, followed a private bill from its inception to its adoption, and his experience has enabled him to compare that method of legislation with the legislative practice in several of the States of this Union. He considers it absolutely no exaggeration to say, that the difference in favor of the English method as against the American is in every respect as great as the difference between the procedure and practice, and the results in the way of justice arrived at, say by the Supreme Court of the United States, and the procedure, practice, and the judicial results arrived at by a tribunal in a semi-civilized community such as Siam or Arabia.

SIMON STERNE.

THE UNSANITARY HOMES OF THE RICH.

SANITARY science is one of the oldest of the sciences. The hygienic laws laid down by Moses and Hippocrates are to-day just as applicable as they were two thousand years ago, and only need adaptation to our complex civilization. Nevertheless, progress in the practical application of sanitary principles has not been rapid. It has kept pace with the advance of knowledge, but this has, of necessity, been slow and disappointing. Until newspapers began to be widely diffused there was no means of popular enlightenment, and even now people are apathetic about hygienic matters, and neglect the "ounce of prevention," nowhere else so vitally important.

It is only thirty-five years since the first comprehensive health law was enacted in Great Britain; and it was not until the criminal blundering of the Crimean war, and the death of Prince Albert, that the English public were awakened to the need of sanitary reform. Much had been previously done to improve the condition of hospitals, prisons, and factories. Smoke nuisances had been abated and grave-yards in crowded cities closed. Domestic sanitation was, however, an unworked field, which is only now beginning to be cultivated. The principle laid down by Dr. Carpenter, that "the house is the unit of sanitary work," had not been accepted. Building details had been left to the architect; and it was not until medical men awoke to the alarming spread of zymotic disease, due to bad drainage, that people began to question the providential theory of disease, and to raise the warning cry, "Look to your drains."

The most surprising fact is, that while the evils complained of have been found in both city and country houses, and in the homes of rich and poor alike, yet they have been most destructive to life and health in the finest residences here and abroad. The same ignorance and thoughtlessness which led Peter the

Great to select a flooded marsh as the site of his imperial capital, are repeated in the arrangements of the noblest European palaces. Viollet le Duc relates that he had occasion to visit the Tuileries with an old lady of the "*ancien régime*," who noticed with satisfaction what to him were insufferable odors from certain sanitary conveniences in the building, and said that they recalled to her the time before the Revolution when she was a maid of honor. After the death of Prince Albert, his usual study seat was found to be directly over a cess-pool, whose emanations were undoubtedly the cause of his disease. The almost fatal illness of the Prince of Wales at Sandringham was ascribed to a like cause. The ancient palace at Darmstadt, where the Princess Alice was carried off by diphtheria, was afterward found to have many leaky drains and unventilated cess-pools. Within a year Badgshot Park, the newly built residence of the Duchess of Connaught, supposed to be perfect in its sanitary arrangements, has been discovered by Dr. Playfair to be filled with sewer-gas. These experiences of royalty show in the most vivid way how little attention has been given to the sanitary arrangements of the costliest and most palatial dwellings. Mr. Rawlinson, the eminent English engineer, declares that Belgravia is the worst sewered part of London, and that the drainage of the Government offices and official residences in Downing street is so indescribably bad that he would rather resign than live there.

These statements are sufficiently startling, but they are no worse than the known facts about the finest residences in the United States. Much has been written and said of late years about the wretched homes of the poor of New York, their squalor, their filth, and the moral and physical degradation of their occupants. All are familiar with the harrowing descriptions of the barracks and slums in which a large proportion of the population of the metropolis live and in which so many of them die. Little, however, has been heard of the unsanitary homes of the rich; and it seems paradoxical to declare that the defects of the costliest houses on Murray Hill rival those of the tenements of Baxter street. New York is the commercial center of the country. The daily transactions of its clearing-houses mount up to millions. Its docks swarm with shipping from all parts of the world, and its warehouses overflow with merchandise from the Ganges, the Thames, the Golden Gate, and the Amazon.

Millionaires jostle each other in Wall street, and bonanza and railway kings are as common as blackberries there. To house the possessors of this wealth, the finest dwellings that architectural taste can design are being erected all over Manhattan Island, many of them of imposing dimensions, palatial in their adornment, and seeming to lack nothing to promote comfort, enjoyment, and health. Yet I venture to say that a large number of these houses are mere whited sepulchers, and their luxurious inmates are exposed to constant risk of disease and death. The story of the rich man who tore down his barns and built greater ones, has a parallel in hundreds of cases, where the possessor of wealth, acquired by years of persistent labor in mining, manufacturing, commerce, or speculation, comes to New York to enjoy his gains, buys a mansion, adorns it in æsthetic style with costly frescoes, rich upholstery, elaborate carving, and bric-à-brac, and then has some member of his family stricken with sickness, due to sanitary defects in or near the dwelling.

If we critically examine one of the palatial residences on Murray Hill, what do we find? Instead of being spacious, as if the owner liked ample room both for his comfort and to dispense a liberal hospitality, it is long and narrow, as is inevitable from the contracted site. The windows have little, if any, outlook, as the view is shut in by adjacent houses. Each owner seems determined to cover every inch of his land with brick and mortar, leaving only a paved patch some fifteen feet square for a yard, to dry clothes. The bit of grass-plot and grape-arbor, with an occasional fruit or shade tree, formerly in vogue, have gone out of fashion. Rich New Yorkers no longer care for such commonplace things. Their children do not require a play-ground. The family are content with an outlook of bare walls and neighbors' windows. Such yards as may be seen are so shut in as to appear like prison grounds. As the sunlight rarely enters such homes, the long three-deep suits of rooms never seem bright, sweet, or fresh, and there can be no free circulation of air. Such air as does enter the seldom opened windows is redolent with scents from stables, soot from elevated railroads, vapors from factories, or odors from Hunter's Point refineries; the careful housekeeper therefore closes the windows tightly, and the sole source of air is the furnace register, which is supplied from a leaky cold-air box, filled with cellar-damp and street-dust. When ignited, the latter smells like burnt feathers, and on analysis it yields twenty

per cent. of organic matter. Yet air of this composition is the chief lung food of nine-tenths of the people of the metropolis. After passing through the furnace registers, it mingles with the vapors from the kitchen and laundry, or with gases from leaky drains or foul plumbing fixtures and the products of combustion from scores of gas-jets, forming what Professor Huxley aptly calls "a stirabout of solid particles," and a poor substitute for nature's atmosphere.

Ventilation is decidedly one of the lost arts, and in most houses there is hardly a pretense of providing it. The sole dependence for fresh air is usually windows and open fire-places, the latter of which are becoming common. Where flues are provided to carry off foul air, they are so small and so roughly lined as to be of little utility. Ventilating shafts are little better, as they are seldom provided with proper openings at the roof, while the skylights over halls are in hundreds of cases tightly sealed. In a vast majority of houses, the air from the lower floors stagnates in the rooms next the roof, whose occupants are in a constant state of stupor from the impure atmosphere. The increasing prevalence of catarrh and pneumonia is pronounced by many physicians as due to the unwholesome air which our people breathe.

Two thousand years ago, Hippocrates said a dry soil is essential to health. A damp cellar is one of the least desirable features of a dwelling. Yet, Professor Chandler declares that not one house in a hundred, in New York, has a properly constructed cellar which explains the large proportion of deaths from consumption, and the prevalence of rheumatism in the metropolis. In the main part of the occupied portion of Manhattan Island there is no soil drainage. Sewer connections are usually made with tile drains, which are rarely tight, and hence they seriously pollute the soil. There is a lack of ventilation and sunlight in cellars, which are crowded with wood and coal bins, wine closets, and domestic rubbish. Householders should follow Professor Chandler's advice and inspect their cellars once a month.

In the best houses, the provisions kept in refrigerators are exposed to the chance of contamination when the drip-pipe connects directly with the house-drains. Frequent cases of sickness have been traced to this cause. Water tanks and cisterns connected with soil-pipes are exposed to like contamination. The space behind the wood-work of basins, sinks, and other fixtures

is almost invariably foul. Slop sinks are sources of offensive odors, and all these evils are intensified by the lack of water for flushing purposes, owing to the deficient pressure.

The multiplication of servants, and the lack of responsibility for domestic details, have an important sanitary bearing. In houses which have the largest number of domestics, there is often the least attention given to cleanliness. In one of the worst dwellings I have had occasion to examine, and where a death occurred under peculiarly tragic circumstances, there were nine servants, and if the number had been larger, I fear the whole family would have been carried off. In proof of the correctness of these assertions, I may cite the steady advance in the death-rate of New York City; the statements by official inspectors of the Board of Health of the amount of bad plumbing found everywhere; the evidence of other professional observers, like Col. Waring, that defects in house drainage are prevalent in the very best houses, "almost without exception"; and the testimony of physicians like Dr. Fordyce Barker, Dr. Willard Parker, Dr. Frank H. Hamilton, and others, based upon wide experience and extensive practice. If other evidence were needed, it might be found in the number of practicing physicians in New York City, the drug stores on every corner of the leading thoroughfares, and the large outlay for medical attendance and drugs in most families.

But this state of things is not confined to the metropolis. From Brooklyn, Boston, Philadelphia, Washington, St. Louis, Chicago, Cincinnati, San Francisco, and other cities, large and small, the same story is heard. The trail of the serpent is over them all. Wherever "Jerry" builders, ignorant plumbers, and unscrupulous owners or speculators are found, the same deplorable condition of things exists. In Brooklyn, the finest homes on the Heights have been polluted with sewer-gas, despite their superb situation overlooking New York Bay and swept by winds from every quarter. At the time of the Rockwell case, in 1879, a dozen houses on Montague Terrace were visited by diseases due to bad plumbing. Few of the houses have any barriers against sewer air. During the extensive epidemic of diphtheria in 1881, defective plumbing was found in the majority of the houses where cases occurred. In Washington, the sanitary defects in the White House, which are believed to have contributed to President Garfield's death, are equaled by those in

several public buildings, where trapless water-closets, leaky drains, furnaces with polluted air-supply abound. Mr. C. A. Robinson, Inspector of Plumbing of the District of Columbia, records a number of similar evils, many of them in "good houses, some among the finest in the city."

In Boston, many fine residences, especially in the fashionable Back Bay region, lack sanitary safeguards. Thousands of houses are built upon piles in made ground. In the process of settling, which may continue for years, the drains are inevitably dislocated, and this permits sewage to saturate the foundations and subsoil. I have known seventy-eight cart-loads of earth polluted in this way to be taken from under a building. This condition of things may exist for months, and even years, without a suspicion of harm, until serious sickness breaks out. Mr. Theodore Clarke says: "In my experience, defects of this kind are far more common than leaks in iron soil-pipes, imperfect traps, or other defects attributable to the plumber." The thickest concrete flooring is no barrier to drain-air, which, after entering the cellar, readily finds its way through the recesses in walls where plumbing pipes and furnace flues are carried to the remotest point of the building. An official examination of three hundred and fifty-one houses, made in 1878, showed that fifty-five per cent. of the drains were imperfect. In Chicago, out of seventy-five houses where diphtheria occurred, only four were found in a sanitary condition. In St. Louis, Health Officer Moore stated, in 1879, that there was probably not a single house with perfect drainage, while in the vast majority every sanitary maxim is violated.

As may be inferred, if plumbing in these localities is so bad, it is still worse in small cities and towns. In such places, men of wealth aspire to build residences rivaling those of the great cities, and with all modern improvements. Neither the architects, however, nor the plumbers on whom they rely, have hitherto been equal to the task. The former are no better informed than their city brethren, while the latter are mostly tinsmiths who have had no practical training in plumbing and who make extraordinary blunders. The most carefully drawn specification will hardly restrain an ignorant or unscrupulous mechanic from scamping his work. Hence, hundreds of examples of criminal blundering may be found in these places. In St. Paul, Minn., galvanized iron is invariably used for ventilation pipes. The

rest of the plumbing is on a par with this practice. In Rochester, I am told that there is only one practical plumber among the thirty men in the business there, and when tinsmiths have contracted to plumb a fine residence they have had to borrow a journeyman plumber to make the wiped joints, as tinsmiths can only make "bolt" joints. In another city in the center of New York State, a fine mansion which cost seventy-five thousand dollars had such small chimney flues that not one of them would draw, while the plumbing was simply wretched. A bath-room in the center of the house had no ventilation except through a transom window which opened over the head of a bed. The occupant of that bed died of typhoid fever. Another bath-room was ventilated by a small pipe into a chimney flue, and the odors passed into the dining-room on the floor below, causing so much offense that the fire-place had to be bricked up.

Three causes have contributed to the prevalence of defective house drainage. First, plumbing practice has not developed so rapidly as other useful arts. Houses built only a few years since lack many sanitary requirements. Since 1878, a revolution has been effected in methods of work and in the character of plumbing appliances. A large manufacturer of plumbing supplies states that his sales of fine goods of this class during the past three years exceed the total sales of the previous thirteen years. The widespread agitation by the press and by technical journals has made the public appreciate the necessity of having the best plumbing in their houses. The time is not distant when people will be willing to make a reasonable outlay to meet the sanitary requirements of dwellings. Second, the number of plumbers competent to do good work is small. The great majority have had to depend upon contract work, which of necessity is cheap and inferior. Few of them have had opportunities to execute work of the best kind. They have been snubbed by architects, cramped by customers, their motives distrusted and their intelligence belittled. A plumber who is conscientious and disposed to render a fair equivalent for his pay cannot compete with unscrupulous rivals and must be content with a limited business. The mass of the trade are grossly ignorant of scientific principles, and are influenced too strongly by mere considerations of profit. If a customer does not want good materials or the best workmanship, the ordinary plumber furnishes a poor quality of both, suiting his service to his pay.

Even when the owner is wisely liberal and desires to have the best that money can supply, the plumber, from ignorance, may be incapable of meeting his wishes, and one constantly finds houses in an execrable condition when no limit has been placed upon the cost. Again, some plumbers who have gained a reputation for good work will deliberately trade upon this reputation, and by employing a few good workmen and a larger number of inferior hands or boys, will strive to make the skill of the former supply the deficiencies of the latter.

It might be expected that our architects would give special heed to sanitary requirements, but thus far they have been too busy with the æsthetic side of their profession, simply because this is what their clients expect from them. Hence the plumbing and drainage of a house are usually left to the wisdom and care of the builder or plumber, with what results the public too well know. Any one who has had occasion to read the plumbing specifications drawn up by the average architect will be filled with amazement at their crude, incomplete, and unsatisfactory character. Even where, as in New York, printed blanks are provided by the health authorities, a large proportion of the plumbing specifications have to be returned for revision.

As human nature is constituted, and while men must live and carry on business under severe competition, it is only to be expected that plumbers will be governed by self-interest; but householders may avoid being victimized by employing only men of intelligence and standing. There is a strange delusion on the part of the public that a plumber who works himself and has a shop in a cellar must, of necessity, be more intelligent and cheaper than a workman employed by a reputable firm who can afford to have an attractive shop in a good locality. Hence one constantly finds the most stupid and rascally fellows admitted into the best houses, and allowed to do as they please with the drainage. Some one has said that a man cannot handle lead without moral deterioration. A more rational explanation of the deficiencies of plumbers would be, that where men's pecuniary interests are opposed to their sense of what is right they become what is called "business honest," and sacrifice others' interests to their own. The day of retribution, however, is fast coming to the men who have done inferior work in this line.

Another cause of the unsanitary condition of modern houses is the parsimony or false economy of their owners. There seems

to be a special temptation to skimp and save in plumbing. Yet it constantly happens that the whole drainage arrangements of a house are spoiled by such a penny-wise policy. It is always cheapest to have good work, and the cost of tearing out and correcting defects is usually three times the outlay for making work perfect at first. As Emerson remarks: "The difference between what is good and the best is sometimes as great as between what is good and what is bad." A slight flaw in the drainage of a house may ruin the whole. As a chain is never stronger than its weakest link, so the most elaborate system of plumbing depends for its security upon the perfection of every detail.

Furthermore, householders must learn to distinguish between things which are essential and those which are merely ornamental. They must not consider a stain on a marble slab or on the lining of a bath-tub a more serious offense than a soil-pipe full of sand holes or one jointed with cement and putty. Neither must they take it for granted that because the visible work about a house is neatly and carefully finished, the work hidden under floors or behind casings is of equal quality. When one reads descriptions of the gorgeous sanitary arrangements in certain London artists' homes, where lavatories are fitted up with coral, silver, crystal, and marble slabs, inlaid with uncut gems and ornamented with silver and gold, he cannot but wonder, in view of the shocking sanitary defects in the homes of the English nobility and of royalty itself, if the rest of the work is scientifically planned and executed.

Often the cry is raised that people should abolish plumbing altogether in houses. Such radical measures, however, are needless and unwise. Good plumbing is healthful, convenient, and comfortable, and it is as absurd to talk of abolishing it as of abolishing cleanliness, sunlight, or fresh air. Many persons try half measures and remove basins from bedrooms, but ignore the more obvious and serious defects of pan water-closets, foul slop-sinks, and other fixtures which are found in the very finest houses in close proximity to living and sleeping rooms. Still others have recourse to devices for excluding or destroying sewer-gas, so widely advertised of late, but which have justly been described as humbugs and frauds upon the public.

Thus far I have referred specially to houses owned by their occupants. There is a still larger class, that of leased dwellings, owned by individuals or by large proprietors, as the Astor, Rhine-

lander, Goelet, or Lorillard estates. They are situated in fashionable sections, and command a high rental. The plumbing is often elaborate, and was originally of average good quality. Sanitary science, however, has made such rapid strides of late, that the materials, appliances, and methods of ventilating fixtures and pipes in use ten, or even five years ago, to afford security against sewer-gas, are now obsolete. Plumbing practice in the past was based on English experience, and has been largely modified to suit our climate and domestic habits, while experience has shown the necessity of using heavier material, better and more costly fixtures, and more elaborate methods of trapping and ventilation. As the lead soil-pipes, brick and stone drains, and cheap and inferior fixtures, to be found in most leased dwellings a decade since, have yielded to the wear and tear of time, landlords have made improvements, but in an economical fashion, having always their own interests in view. It is but natural that property owners should be slow to spend money for the benefit of their tenants. They usually employ a plumber who has sufficient discretion not to put his customer to excessive expense, by doing everything a tenant may want or which his own judgment may tell him should be done to insure safety. The result is systematic patchwork and deception, by which the tenant is frequently led to think that everything has been made right, although dangerous defects still exist. Often, only through the intervention of the Board of Health can landlords be forced to provide improvements. Again, even where a tenant himself pays for needed alterations, the plumber is ashamed to stultify himself, and hence omits to completely cure existing defects. Flagrant cases of this kind have come up in my experience. A gentleman rents a house in the belief that it is in good sanitary condition. He is assured by the landlord that all sanitary safeguards are provided. In time, bad odors are noticed and sickness breaks out. The landlord, when applied to, sends his plumber, who makes some slight changes, pronounces everything all right, and goes his way. Again trouble ensues, the same course is repeated, and finally the landlord declares that nothing more can be done. Recourse may then be had to the Board of Health, whose inspectors will suggest some additional changes, or may not find anything to correct. Finally, a sanitary expert is called in, who usually discovers some serious defects in the drainage arrangements. The tenant is naturally indignant, and asks an

explanation. The landlord refers to his plumber, who, when brought to book, admits that he has considered the interest of his employer alone, and made only such improvements as he thought the latter would approve and pay for.

Within a few years there has been a popular *furore* in favor of apartment houses, and numbers of flats of colossal proportions and costly construction have been built and quickly leased at high rentals. These buildings, however, are often no better in their sanitary arrangements than the average private dwellings. As a rule, they are overheated, especially the halls; usually there is inadequate ventilation, dark rooms abound, and the plumbing, while claimed to be of the best, is lacking in many essentials. Lastly, there is great danger from fire in these buildings. In more than one large apartment house wooden stair-ways surround elevator shafts, which, as repeated experience has shown, will serve to convey a fire almost instantaneously from cellar to roof. Again, the very care taken to deaden floors and prevent the transmission of sound will make it difficult to alarm the tenants in case of fire. The fact that insurance companies consider apartment houses as extra hazardous risks tells its own story; and the possibility of a fire in some of these huge structures must be anticipated with a dread which the late conflagration in the Cambridge flat more than justifies.

The sanitary condition of the summer homes of our wealthy citizens at the sea-shore and other health resorts is on a par with that of their city residences, with this difference, that the drainage arrangements are usually executed by country plumbers, who are even inferior to city mechanics, while the universal dependence upon leaching, and unventilated cess-pools in proximity to wells and cisterns, is a constant source of danger. The repeated epidemics of typhoid fever and malarial diseases in localities where such conditions prevail, and the fact that visitors are seized with these maladies after their return to the city, are ample evidence of the unhealthfulness of summer resorts. Despite the outdoor life and the exercise which visitors enjoy, it is beyond dispute that the health of the city as a whole is higher than that of the country, and that the risks of a summer spent at so-called health resorts are of a serious nature.

After seeing the ills which beset our wealthy householders in their domestic surroundings, if we visit their counting-rooms and offices, where the male members of the family amass the

wealth so lavishly displayed in their homes, still further surprise is experienced. Take any one of the huge buildings downtown, where hundreds of firms, with their clerks, are daily absorbed in business affairs, and what do we find? Into a vast number of offices the direct rays of the sun never enter, and they are dimly lighted by shafts, by reflectors, or by gas. Their sole dependence for air are windows, which are rarely opened, and which look upon small, dingy courts or narrow, gloomy streets, from which lofty adjacent buildings exclude all light. Ventilation is scarcely known in these places. Elaborate and costly devices are often provided to carry off foul air, but they constantly fail to act, as there is no provision for pure air or for providing heated currents to carry away the impure atmosphere. In the private offices of the heads of firms open fires may give some relief, but steam coils are the main dependence for warmth, and slowly and remorselessly roast the occupants with their dry, unvarying, and debilitating temperature.

Many offices are situated in basements, just over damp cellars; others are off dark, dank halls in close proximity to foul plumbing fixtures; while everywhere the unwholesome fumes from gas-jets, the burnt dust which settles on steam-coils, and the impalpable impurities from samples or goods stored near by, contribute to pollute the atmosphere. Any plumbing is thought to be good enough for business buildings. The wear and tear to which it is exposed from careless clerks and boys, and the neglect of janitors, with the absence of water for flushing, all contribute to make it unwholesome. Furthermore, the sewers are often very bad, in many cases, stone drains roughly constructed, without proper pitch or ventilation, and with no means to keep them free from deposits. They were originally intended to carry off surface water, and are wholly unsuited to convey sewage. There is no barrier to prevent sewer air from finding its way into buildings, nor are soil pipes carried through the roof, of full size to permit its escape into the atmosphere above. Hence such buildings are found saturated with sewer-gas, and their occupants, too absorbed in business cares to heed their unsanitary surroundings, learn only too late what are the physical effects of such exposure.

These conditions undoubtedly explain the worn, weary, blanched, and prematurely aged look of so many business men. The wholesale introduction of steam for heating office buildings

threatens to increase the crop of evils just pointed out, and to intensify the nervous strain which Dr. Weir Mitchell and other specialists note as so destructive to health. Our people are starving for the want of fresh air, and it is no wonder that the tired broker or merchant, after a toilsome day in his stuffy office, seeks relief in stimulants or becomes the victim of chronic dyspepsia, nervous exhaustion, insomnia, and brain paralysis. Some of the most remarkable examples of unsanitary conditions in my experience have been in business offices, and in more than one instance in new buildings supposed to have perfect plumbing. In the directors' rooms of wealthy corporations and the private offices of bank and insurance presidents these evils are found in their worst form.

Here, then, are certain facts which are sustained by the steady growth of zymotic disease and by the evidence of many observers, who have had like opportunities with myself to inspect dwellings. The question may pertinently be asked, What are our wealthy citizens going to do about it? Will they continue to pursue the ostrich policy which has prevailed of late years with such direful results? In other instances, when large numbers of people have been threatened with danger, societies have been formed to diffuse knowledge and inaugurate reforms. It would, therefore, seem timely to found an Association for Improving the Condition of the Rich, to send missionaries and to diffuse tracts among the benighted class, who, as has been shown, are exposed to such dangers. Undoubtedly the whole community would be interested in so benevolent a movement, and would contribute liberally toward its support.

CHARLES F. WINGATE.

SCIENCE AND PRAYER.

PRESIDENT ANDERSON.

IN our day a class of able men, many of them distinguished scientists, think that the biblical view of prayer is altogether false; that it will do well enough for children and ignorant men and women, but can no longer satisfy the intelligent and the learned. These men represent prayer as futile, because the laws of the material universe are absolutely immutable — nothing can in the least change or modify them; therefore, to pray for rain or for recovery from sickness is as great a folly as it would be to attempt to dam up Niagara with a straw. When the atmospheric conditions are fulfilled, the rain will descend; when the physical and hygienic conditions are suitable, the sick will be restored to health. Yet we must be just to these scientific men. They do not all agree in opinion any more than the theologians do. Some of them are theists: their God is a personal God, who hears prayer. He may, they affirm, in answer to prayer, bestow on men spiritual blessings. If they pray for enlightenment, the spirit illuminates their minds; if for forgiveness of sin, that blessing is bestowed and the assurance of it; but, say they, we cannot rationally pray for physical good, for material blessings, since in the material realm all is governed by laws fixed, unchangeable.

Still others affirm that prayer is a rational exercise, not because the petitioner directly receives in answer to his prayer either spiritual or material good, but on account of the reflex influence of prayer in his own mind and heart. It changes him. It lifts him up into communion with Him in whom is "no variableness, neither shadow of turning." No real answer to prayer comes down from God to us, but by prayer we are lifted up toward God and transformed into his likeness. That there is this reflex influence in prayer, no candid observer can for a moment doubt; but that this is all that is implied in answer to prayer, we are not yet ready to admit.

Such, then, are the views, not of all, but of many of the scientists of our day. Whatever may be the diversities in their views, there is substantial agreement in this, that the immutability of the laws of nature shows the folly of prayer, especially for material blessings. That such views are at variance with the Scriptures, the dullest can see. Both the biblical view and this of the materialistic scientists cannot be true; they are utterly in discord with each other, absolutely contradictory. Christ says with positiveness and with sweeping generality, "Ask, and it shall be given you"; the scientist says it is folly to ask, as no blessing, since the laws of the material universe are immutable, can be bestowed in direct answer to prayer. It is clear, then, that either Christ and his apostles, or the materialistic scientists, are mistaken.

We wish, "with malice toward none and with charity for all," to call attention to some points in the position of those scientists who have essayed to be not only our scientific, but also our religious teachers, which seem to us to be weak and untenable; and by our tentative criticism to suggest that perchance the soundest science does not yet summon us to abandon the biblical view of prayer; that it is quite possible that he who spake, his enemies being the judges, as never man spake, never dropped a word in reference to prayer which conflicts in any degree with absolute science. The question before us, then, is whether the doctrine of prayer as presented by Christ in the New Testament is at variance with established science.

Let us first briefly define our terms. What is science? It is what we really know in all departments of investigation, whether the subject be the material universe or the acts and states of the soul revealed to us through consciousness. To know scientifically, to be sure, implies accurate observation, analysis, generalization, and correct classification; but all these processes simply help us really to know, and to know is the pith of the signification of the term science.

An honest, rigid application of this definition would reduce many ponderous volumes on science to the compass of books fitted to take their place in some vest-pocket series. Much of so-called science is nothing but theories or hypotheses to account for phenomena which everywhere confront us, many of which still remain unexplained. We do not object to these hypotheses as such; they are good in their place. They are the tools with

which scientific men do their work. All advancement in scientific knowledge has been made by using them; but until proved to be true, they are no more science than the chisel with which the sculptor works is the statue which he brings forth from the marble. We must make a sharp distinction between science, that which is absolutely known, and hypothesis, by means of which we strive to know.

On the other hand, what is prayer? It would not specially serve our purpose to attempt a comprehensive definition of it; but we wish to call attention to a single element which should enter into every just definition of prayer. It must be manifest to any one who thinks at all, that men are dependent beings. In the family, in society, and in business, we all, to a greater or less extent, lean on one another, children on their parents, wives on their husbands, the ignorant and the weak on the learned and the strong, and the poor on the rich. Now, lying at the very core of prayer is the fact of our dependence on God. By asking blessings of him, we confess that dependence; but in this confession of dependence, we not only submit our weakness to his strength, but our ignorance to his wisdom. We ask, conscious that we may make grievous mistakes in asking, so that the innermost spirit of true prayer is the submission of the petitioner to God. The cry of Christ in Gethsemane, as he prayed in agony that the cup might pass from him, "Not my will but thine be done," is the undertone of all genuine prayer; so that God answers us truly, when, instead of giving us what we ask, he gives us rather the thing which, in his wisdom, he sees that we need.

The real difficulty in the way of God's answering prayer, according to some able scientists, is, as has already been noted, the fact that the laws of the material universe are absolutely unchangeable. This has led some theistic scientists to affirm that prayer for spiritual blessings may be answered, while prayer for physical good—for example, for rain in time of drought—is folly. But if fixity of law makes prayer for physical good absurd, it must make equally foolish prayer for spiritual blessings, since law is just as fixed in the realm of mind or spirit as in the realm of matter. The laws by which the mind is developed are just as immutable as the laws by which the oak is unfolded from the acorn; the laws by which we think are as rigid and fixed as those which regulate the rivers in their flow or the clouds which

sweep across the sky. If, on account of the fixedness of law, it is absurd to pray for rain, it is for the same reason equally absurd to pray that the divine spirit may illuminate our minds and guide our thoughts. If, then, God may answer prayer for spiritual gifts, he may, in spite of the unchangeableness of law, answer prayer for physical blessings.

But we also suggest that the position which we combat is probably untenable, on the ground that these able scientists do not, in stating their objections to prayer, use the term law with that precision of meaning that is requisite in scientific discussion. Sometimes they personify it. It seems clothed with personality, as when they tell us that the laws of nature do this and that. They often deify it, ascribing to it attributes which the devout theist ascribes only to God. This is the method of poetry rather than of science. Every thinker knows that the term law has several distinct meanings. It will be sufficient for our purpose to note barely two. We call attention to the first simply because of its diversity from the second, so that by the contrast we may add to the vividness of the second meaning, on which we propose to comment. First, we speak of moral law. It is distinguished by oughtness. We are so made that we discern a distinction between right and wrong; we know intuitively that they are opposites. Men universally recognizing this distinction feel that they ought to do the right and shun the wrong. This ought is mightier than all other forces which impel men to action. This distinction of right from wrong, and the oughtness which presses a man, as with the superincumbent weight of a mountain, to do the right, constitute the essence of moral law. Bentham, in his utilitarian argument in reference to morals, was so troubled with this element of oughtness that he declared that the word ought "ought to be banished from the vocabulary of morals." From the inexorable necessities of his own being he could not say it in any other way.

Now, when we come to talk of the laws of the material universe, we have in mind a very different conception. No oughtness appears. We mean simply the processes of nature,—the ways in which things, so far as the observation of men has extended, come to pass. When the cold reaches a given degree of intensity, water freezes; we say that that is a material law. When the higher temperature of spring comes, the ice melts and vegetation starts; we call these processes laws. When vapor freezes,

it takes the forms of crystals; and this process we call a material law. The profoundest scientist cannot carry his analysis any further. He knows more than a clown or a child only because, by study and extended observation, he has seen more of the processes of nature, and has generalized and grouped them. In any single example, he can only see what the ignorant may see,—that a law of nature is simply the way in which a thing, in the material world or in the world of mind, is done.

Now, since in these varied laws of nature we see that certain useful ends are met, the suggestion inevitably comes that intelligence established these laws or now works out these varied and beneficent processes. Since a law of nature is nothing more than the way in which a certain thing is accomplished, it is certainly not contrary to anything which science has discovered to consider the laws of nature simply as God's methods of doing things. Such a supposition does no violence to scientific method, while it provides a suitable cause for the beneficent element in these laws. If it is asked why these processes, or laws of nature, on the supposition that they are God's ways of working, are fixed, invariable, we find a ready answer in the biblical revelation of God's nature and character. Being absolutely perfect, when, for the first time, he did anything, he did it with absolute perfection. When a thing is perfect, there can be no change for the better, since nothing can be any more than perfect; but God cannot change, in these processes of nature, to that which would be in any sense imperfect, since that would be a contradiction of his own absolute perfection. So we find in the character of God, as presented to us in the Bible, the sufficient reason for the immutability of natural laws, when we regard them as simply his methods of acting. So when David sang, "The Lord also thundered in the heavens, and the highest gave his voice," he may not even in his imaginative song have uttered anything opposed to the strictest science; it may be that in such diction, poetry and science met together and kissed each other. But if these processes of nature may, without the slightest conflict with science, be considered simply the actings of God immanent in his own creation, it is not impossible that, working by these unchangeable processes, he may answer the prayers of his children.

And it will not be difficult for us to discover by analogy how, in perfect harmony with the fact of the immutability of

natural laws, God may do this. The perfect confidence of men in the fixity of natural laws underlies all their acts. Without such confidence they could not construct or work the simplest machinery. They would not dare to sail lake or ocean, lest by a change of natural laws their vessel should suddenly sink rather than float. But because they know these laws to be immutable, they use them with confidence in all their manifold activities. Now, from analogy, we are able to see how the immutability of natural laws, instead of being an obstacle standing in the way of God's answering prayer, may become rather the very means by which he answers every prayer of faith. Men, because these natural laws are unchangeable, are able by the adjustment to each other of even a very few of them to secure the most wonderful results. The adjustment to each other of a few immutable laws gives us the steam-engine, which moves most of the machinery of the civilized nations. The adjustment of a few immutable laws drives our great merchant ships around the globe. The bird which darts upward into the air and onward through it with such great velocity, instinctively adjusts a few unchangeable laws to bring about this surprising result. If men, with their limited knowledge, and the birds of the air by instinct, can use unchangeable laws to reach such marvelous and varied results, can not God, who established these laws, so adjust them to each other as to answer every true prayer breathed into his ear? Immutability of law, then, does not make prayer even for physical blessings a folly, but rather suggests to us how God, because of this very immutability, may answer every true petition.

Then we are never to forget that at the best we know but little. La Place is reported to have said, just before he died, "What we do not know is enormous." We have discovered, by centuries of toil, a few natural laws. As the circle of our knowledge has widened, we have become aware of a still greater circle just beyond that no human mind has ever explored. And in the future, as our knowledge extends, we shall ever grow more and more keenly alive to the infinite reaches of being and of law which we do not know. What we know of the laws of the material universe compared with what we do not know, is like the handful of sand in the hour-glass compared with the vast Sahara. If man, with his very limited knowledge of unchangeable laws, can by their adjustment to each other achieve so much,

who shall limit in his achievements Him who understands all laws, and who, by the simple act of his will, can adjust these myriads of laws to each other so as to satisfy the cry of every one of his creatures?

Moreover, those who have arrayed science and prayer against each other have sometimes complacently sneered at those who still believe that God answers prayer as being honest enough, but pitifully unscientific. Now, such men ought not to complain, if we demand in them what they demand in others. No theory designed to account for any class of phenomena is worth anything unless it takes into consideration all the known facts and makes suitable provision for them. Those who contend that, on the basis of the immutability of natural laws, it is folly to pray, have never in their theory made full provision for the entire contents of the fact of prayer. If one thing in reference to man has been established beyond every other, it is the fact that he has distinctively a religious nature. Wherever found, be he savage or civilized, he is religious. He universally has his places of worship, rude or artistic; he has his shrines and altars, and offers to his god or gods sacrifices bloody or unbloody. Heathen, Moham-medan, and Christian alike pray. Even men who declare themselves atheists will sometimes pray, when they get into a pinch; and in their highest and best moods will utter words of praise to Him whom they declare not to exist. Now, a fact so universal as prayer must be in some way accounted for. Does it not carry the evidence in itself that there is an answer to it? We find it to be a general law of our being that satisfaction is provided for every natural and right desire. We hunger,—without us are manifold harvests and barns bursting with plenty; we thirst,—without us are lakes, bubbling fountains and purling brooks; we long for the beautiful,—without us in myriads of objects is beauty more subtle and delicate than was ever expressed by the brush of the painter or the pen of the poet; we crave the sublime,—and cataract, and mountain, and heaving ocean, and the awful storm, answer the inward desire. As, in these cases, the hunger, the thirst, the longing, and the craving are evidences within us of the satisfaction without us, so prayer, the deep longing or craving of man's religious nature, carries with it the decisive evidence that there is without an answer which will meet and satisfy it. If this be not so, then for our physical and intellectual cravings answers beautiful and complete have been provided,

while the cravings of our higher religious nature have been left uncared for and unsatisfied. This a school-boy could not fail to stamp as the rankest absurdity. Prayer is either answered, or else those desires which impel man to come into communion with God are, of all the desires of his being, alone a mockery. Is any one credulous enough to believe that?

Any sound theory of prayer must also take into account another fact, namely, that of testimony. Men affirm that God has heard their prayers. From the number of witnesses let us exclude all those who might reasonably be accused of fanaticism; yet we have failed to see why the testimony of a fanatical Christian is not just as trustworthy as that of a fanatical skeptic. We will exclude, too, all witnesses who may be reasonably suspected of having had collusion with each other. Then we will sift the testimony of the clear-headed, unbiased witnesses, striking out every statement which may, with the slightest show of reason, be considered as an illusion of honest but mistaken men. Even then, the testimony gathered from the witnesses of all time that would remain, all bearing on this one point, would, if printed in books, make a vast library. Can any just theory in reference to prayer omit a fact of such magnitude? Would it be scientific to ignore all this testimony of the purest and best men that ever lived? If their testimony is declared fanatical, would that not prove too much, if mere assertion ever proves anything? Would it not show that the fanaticism of the ages has contained within itself the godliness, the purity, the virtue of the ages? No, there is no way in which we can scientifically thrust such testimony out of sight. It stands as solid as granite, as clear as crystal, and he who would be scientific in handling the fact of prayer must take it up into his theory and account for it.

If it should be said that prayer and its supposed answer is simply a happy coincidence, we might grant that in one, or two, or three cases it may be, and do no despite to science. But take fifty cases, or five hundred, or ten thousand, and declare in every case that we have only a lucky coincidence, and such a number of coincidences would tax our credulity far more than to admit that God in reality answered the prayers: so large a number of coincidences would be a thousand-fold more mysterious than the fact that these men cried unto the Lord, and that he, in mercy and love, heard their cries and satisfied their wants. By no device can we, with a strict scientific spirit and method,

brush aside the vast mass of testimony that God has answered prayer.

Our argument in brief, then, is this: from any proper definition of science and prayer, we cannot discover anything within them that brings them into conflict. Those who rule out prayer for physical blessings on the ground of the immutability of natural laws must, if consistent, rule out prayer for spiritual blessings also, since law is as fixed in the realm of spirit as in the realm of matter. Confusion often results from a lack of precision in the use of the term law—a physical law being, to our observation, only a process in the material world; but as we see that in the process beneficent ends are reached, that fact suggests that the process may be simply God's method of acting. By these very processes, therefore, God may answer prayer. As men, by adjusting to each other the few immutable laws of the material world which they have laboriously learned, reach all the varied and marvelous results which we see produced by mechanical contrivances, so God, who works in and through all the laws of his universe, by their adjustment, without in the slightest degree infringing them, may answer every prayer of his people. Any truly scientific theory of prayer must account for the fact of prayer, and deal dispassionately with the mass of testimony given, down through all the ages, that God has, in almost innumerable instances, answered prayer.

After a calm, dispassionate examination of all that has been written by materialistic scientists about the impotence and folly of prayer, we may, without the slightest danger of being unscientific, still believe and obey Him who, speaking with unerring wisdom, said, "Ask, and it shall be given you."

GALUSHA ANDERSON.

MR. WAKEMAN.

THEOLOGY is the past tense; Science is king. Such is the conviction of thousands who lead or hope to lead the world. The reason is, that science has the only verifiable, and therefore the only reliable test of what is true, or good, or beautiful. The practical life of man, the arts, commerce, medicine, law, and even philosophy and ethics, have become firmly established only as they have been founded anew upon scientific methods and results.

Will religion be the exception? Or will science banish theology from that, as it did astrology from astronomy? Will the ultimate, the religious, conceptions of mankind be annexed to the scientific domain? If so, this new solution of the world will evidently supplant the ancient one and become the creed of the intelligent of the race, the basis of its higher integration. The rapid progress of science toward this result is the most astonishing phase of human history. This new solution of the universe—this idea of law, which is pushing will from the throne—dates not further back than three hundred years (A. D. 1600), when the Copernican astronomy, by the substitution of the heliocentric for the geocentric theory, presented man with a new heaven and a new earth, a new cosmogony, which necessitates a scientific religion, and will leave none other possible.

It may be replied that science cannot for ages reach the masses of the race who are still Fetichists, nor even the majority in civilized countries who are little better. Granted; but knowledge is power. Those who have this power will control the earth, although they may not have the numbers to inherit it. In the rational and spiritual world there is not equality. The law of evolution assigns rank according to courage and capacity. When the vanguard waits for the rear all progress will stop. The rear will never move until drawn forward by the advance. The blind will never see without the light. The highest duty is to tell the highest truth.

What, then, is the verdict of science upon prayer? Prayer is the essence of religion; is, indeed, practical religion under theology. But will the coming scientific, intelligent man pray at all? If not, from whence can he derive the reliance, comfort, and discipline that prayer has afforded to the past generations of men? If prayer is not a means of grace under the new and higher integration, what will take its place?

Evidently prayer is useless unless prayer is answered. Does not the scientific proof that prayer is answered wholly fail?

At the very first step, the fundamental laws of modern science seem to render prayer-answer *a priori* inconceivable. Those laws are: the indestructibility of matter, the correlation and equivalence of forces, gravitation, and the law of evolution. This last law is now recognized as the backbone of the organic, the social, the mental, the moral, and the religious sciences. The old rudimentary beliefs about the uniformity of nature, and

that like causes and conditions produced like effects, have been summed up and verified invincibly in these laws. They are the greatest acquisition of the human race, and together form the new solution of the world. All science is merely their repetition or extension; its literature is their illustration. They are not only drawn from the facts and events of the world inductively, but Mr. Spencer shows ("First Principles," chaps. 4-9) that, at bottom, they rest upon the law of correlation, the contrary of which is from the very constitution of our minds inconceivable. Thus, the indestructibility of matter and the persistence of force are not only proved by every observation and experiment, but upon ultimate analysis are found to be the condition of thought itself. All notions inconsistent with these laws are called by scientists *pseudo-conceptions*. They have been inherited in vast masses from the unscientific period prior to 1600, when accurate knowledge beyond simple mathematics was practically impossible.

Is prayer-answer, then, one of those *pseudo-ideas*? The answer is affirmative if prayer involves a break or variation of those laws.

The burden of reconciling prayer with those laws rests upon its advocates. Can it be done? Science seems to answer decisively, No! In the olden times, nothing was more easy than a belief in prayer-answer and miracles, for nothing was more "natural" under the will, or God, solution of the world. "Sacred" literatures are full of these events. The old world was plastic material for the working out of divine and human ends. In its will-science, matter and the laws and order of nature were violated, varied, adjusted, or changed for purposes personal or religious. For instance: water was made wine; or five fishes became a hundred; a storm was broken up; iron floated; or a sacrifice was set on fire in answer to Elijah's prayer. Every instance, and they might be collected by thousands, contains the same illusion; that is, that the matter, or forces, of the world may be changed or increased in violation of, or beyond, the correlate order. In that supposition only consists the value of prayer or miracle. But for this notion of power, over or beyond nature, neither would be sought or used. From the slightest glance at the history of prayer-answer and miracle it is plain, therefore, that both were valued only as they were directly in the teeth of the order of nature, and of what are now known to be

the fundamental laws of science. It follows that this venerable practice will cease in direct proportion as those laws become known and people come to rely on them, instead of on petitions to alter them.

But the *pseudo*-conceptions of this character, and their fundamental illusions, are, as we have intimated, ancient, venerable, and hereditary. Immense capital—material, mental, social, and spiritual—is invested in them. The law of evolution, therefore, leads us to expect that instead of any sudden change there will necessarily arise an immense expenditure of ingenuity to make these *pseudo*-notions appear credible, and a very considerable amount of indignation will be visited upon those who may oppose them.

Let us, then, next examine the most common mode of sustaining this belief. It is simply a part of theology, and is itself unscientific in nature and method. It assumes a God who is anthropomorphic, and yet perfect, infinite, eternal, unchangeable, omniscient, with a will, capacities, and feelings similar to, and yet infinitely beyond those of man. The assumption is that this God, in some way and at some time “in the beginning,” created the world out of nothing, or out of his own potency, and has since governed it in a fixed order, according to the laws of his own enactment, now known to us, however, as the laws of correlation above described. These laws, therefore, under the theological interpretation, are always within the control of this supreme will, and he varies, changes, adjusts, or in some way uses them so as to effect answers to prayer.

But this hypothesis of a personal or anthropomorphic God is invoked in vain. It has no weight with pure Theists, Agnostics, Pantheists, or Atheists. All these classes of thinkers unite in showing that the anthropomorphic conception of God is a false one, and without the slightest scientific warrant; that it is a dogma of theology which cannot be conceived, much less understood, but which must be “received by faith” as a “mystery,” if it be received at all. When mysteries of this kind (as, for instance, the dogma of transubstantiation) meet the law of correlation, they pass at once beyond the domain of science into that Limbo of Vanity, or of poetry and fancy, known in science as Fable and Myth.

But to those who still retain, or imagine that they retain, a belief in an anthropomorphic Deity, will this hypothesis of a

personal God remove or only increase the difficulty? Plainly the latter. It is as impossible to reconcile prayer-answer or miracle with God's necessary and admitted attributes, which are, his omnipotence, omniscience, and perfection, as it is to reconcile them with the Scientist's laws of Nature. Nor, may we add, does such prayer-answer or miracle remain consistent with any reasonable veneration for a Deity. For if the laws of nature be but the order of continuous manifestations of his power, they are invariable, because they must be perfect, for they are the action of a Perfect Being who omnisciently knew all things for all time, and had infinite power to execute all that he knew or wished. Such a Being is, therefore, commonly and properly described as unchangeable, and "without a shadow of turning." To suppose such a Being to alter the order of the world would be to admit that it was not perfectly conceived and ordered in the first place, and that its Maker failed for want of knowledge or power to make it complete. A perfect and invariable God cannot also be imperfect and variable. Such a Being is a bundle of absurd contradictions.

But let us next suppose that prayer was foreknown and fore-ordained by this Supreme Being, as a thing to happen as a part of his government by which man would procure a benefit that God had fore-ordained thereupon to grant. Then the prayer would be useless; for, the event would happen as a part of the perfect world-order without prayer, or, if prayer were decreed to be inseparably connected with the event, then it would be simply a part of it, a superfluous concomitant of the event and useless, since the event would happen without it. The maker of the prayer would be only an automaton worked for nothing. If this be the plan of the world, it is plain that God has fore-ordained to grant benefits to intelligent people without this needless addition, which they have practically dropped. He has wisely fore-ordained that people should drop it as they become enlightened.

But suppose that God has fore-ordained some facts to be born as twins. For he may have arranged "from all eternity," so that a certain event cannot happen without a prayer preceding, which prayer depends upon the volition of some man. Plainly this would be conditioning the order of events, and the order of a perfect world, upon the volition of an imperfect being. This would contradict God's perfection, omniscience, and goodness. The idea that a Perfect Being could let his world be run by im-

perfect and ignorant creatures through their prayers would be simply absurd. Leaving a child in charge of a steam-engine would be nothing to it.

But if the prayer did not thus change or determine the order of its twin event, it would evidently be useless. If it does change that order, God, "from all eternity," knew it, or he did not. If he did not know it, he was not omniscient and perfect. If he did know it, he must have ordered it, for all things must have been fore-ordained by himself in order to be knowable by him. But if he knew and ordained the result, he must be morally responsible for it; and if he is also perfect, the result ordained by him must be perfect. But it could be perfect in one order only; for there cannot be two perfect orders. Therefore, the actual order must have been eternally perfect and eternally ordained, and the prayer for any change must be useless and absurd. Prayer-answer could only lead to imperfections and the consequent inference of an imperfect God.

But, it is said, may not God, in some way, adjust his fixed laws so as to effect answers to prayer much as human beings do, or are supposed to do? The answer is, that scientific laws are unvariable, and therefore always unadjustable. They cannot be adjusted by either God or man. They can only be obeyed or followed. As Bacon taught, man conquers Nature only by obedience. Man may adjust matter, or phenomena, or himself, and events, so that these laws may come in play, as is the case in all scientific experiments. But to speak of man adjusting the laws of nature is a total misapprehension of them and of man's relation to them. Man modifies phenomena by bringing them under laws, but he never varies, or changes, or bends, or adjusts laws in any way whatsoever. Nor can God do it without violating his own attributes and committing logical suicide; for the law is the order which is the condition of his attributes and existence. But if any such thing could be done consistently with God's attributes, would it be less a violation of the law of correlation? Certainly not. If prayer be of any value, it must cause God to vary the order of his correlates in some degree, or direction, or time. It matters not whether this variation from the fixed law is made at the time of the prayer, or years before or after. Whether at once, or gradually, it is a variation of the order which otherwise would have occurred if the prayer had not been offered. Laws, therefore, cannot be adjusted; but man and his affairs may be

adjusted to them by his will and efforts. Thus he is said, by labor and prevision, to modify phenomena to his use, and to avoid the crushing weight of fatalism which the inexorable laws of nature would otherwise bring upon him. But the very possibility on the part of man of this power of modifying phenomena, and so of making his life tolerable, or glorious, depends upon the invariability of unadjustable laws. Let it be supposed for a moment that these laws could be changed or adjusted by prayer, or in any other way, then science and the certainty of life would be gone, and modern civilization would disappear.

But next, it may be said, why may not God, in a similar way to man, adjust and modify phenomena under these fixed laws, and so effect answers to prayer? If man can do this somewhat and beneficially for himself, why cannot God do it for him infinitely more? The answer is, that God must be just as perfect, omniscient, and omnipotent as to phenomena as he is as to their laws. As such, he has settled the phenomena and their order, including man's will and works, as well as all possible laws, perfectly and forever, from all eternity. Man is weak, imperfect, and ignorant, and therefore he has to change and adjust himself according to his own will and imperfection. Man is thus subject to the "struggle for existence," and therefore has developed a will, and uses it to provide for his wants. But God is freed from all strife; will and law are one with him, and cannot be otherwise. Man is a contestant; God is conceivable only and always as perfect. He exists only in perfect order. To suppose that he does not, is to involve the absurdities referred to above as to God's attributes and law.

Lastly, this anthropomorphic notion of God which we are considering makes him the reverse of worshipful. He becomes a limited, imperfect *quasi* human agent, morally responsible for the evils that exist and for all of the sufferings of his creatures. These moral consequences are too horrible to be more than referred to, nor is more than a reference necessary to any intelligent person. All personal Theism, therefore, in attempting to adjust or to escape the order of correlation falls into intellectual contradictions, and ends in making God a moral monster. Such attempts to make prayer-answers credible are hopeless.

But it is said, then let the appeal be to facts: if the case fails *a priori*, it may be proved *a posteriori*. Can it be possible that

the almost numberless facts from sacred and profane records, detailing, even down to our own day, what have appeared to the relators to be answers to prayer, can be wholly mistaken or fraudulent?

To this the answer may seem rude or cruel; but to science, "facts" of this kind, related after the events, even by the observers, are only second-hand facts, and, when repeated by others, have no weight whatever. They simply are not facts to any scientific or intelligent person. Among the superstitious, or those who wish to believe, the eye "brings more than it sees." Such "facts" are illusions, common enough now in uncivilized countries and among the more ignorant Roman Catholic people. They merely prove the credulity of the people who assert them, and their incapacity to make and to cross-examine their observations. Anything desired may be proved to or by such individuals.

But, besides this, the ordinary conditions and "facts" of prayer are commonly not of a verifiable nature, as Professor Tyndall has fully pointed out in his well-known letter on prayer-gauge. No facts on this subject, unscrutinized by science, are of the slightest scientific value, and no such scrutiny has ever been applied. No advocate of prayer dares to imitate Elijah by an appeal to facts that could be known to be real and scientific. And this one fact outweighs all alleged "prayer-facts," and is conclusive evidence that the confidence of prayer advocates is traditional and sentimental and not real.

The truth of this view was well illustrated in 1872, when Professor Tyndall and Sir Henry Thompson proposed, in the fairest and most candid manner, a practical trial, or prayer-gauge, referred to in the above paragraph, so that something might be done to verify this prayer-power, if it have any existence. What was the result? Instead of coöperation, these distinguished scientists were vociferously accused, in the Professor's words, of "insolence, outrage, profanity, and blasphemy"; to which he very appropriately replies: "They obviously lack the sobriety of mind necessary to give accuracy to their statements, or to render their charges worthy of serious refutation." He had simply asked for one test under conditions that would enable prayer to be established. "A single experiment," he said, "is frequently devised by which a theory must stand or fall"; as, for instance, the lesser velocity of light

through liquids, shown at once, was a crucial test against Newton's emission theory of light.

But the crucial test which advocates of prayer in England would not furnish to the scientists was within ten years furnished to the world on the grandest scale (grander than that of Elijah) in America. In 1881, the prayers of fifty millions of people, indeed we may say of the prayer-makers of almost the whole world, went up for months, day and night, but they could not cause the change of a single pus-cell in the languishing form of our dying President. "It was not the Divine will," we hear? Yes; but if the only prayer ever answered is "Thy will be done," why is it not a saving of time and dignity to let that will be done without the useless prayer?

Next, we are told that prayer has been a very general belief in all places and times, and among all religions. Must not the belief and the supposed need of it have some response or counterpart of fact in the order of nature? How else came it ever to exist? Science answers, No. The belief in a thing, and above all our feeling of a want of it, does not affect the external order of nature, nor prove in the slightest what it is or will be. Science has, on the contrary, reversed every important early belief of mankind, beginning with astronomy and ending with the scientific theory of the *ego* or selfhood. The presumption is, that all ancient beliefs are based upon imagination and illusions of the senses, and upon that ignorance of the meaning of facts which universally prevailed during the childhood of the race. It is the very business of science to reverse these beliefs. That the general want of a thing proves its existence is, if possible, still more absurd. The want is simply a counterpart of the belief, and when that is removed the want and practice die with it. Prayer is not only not wanted, but is disagreeable to those who have outgrown it. The existence of fairies, witches, angels, devils, demons, and ghosts can be readily proved by this method. Not solid facts, but illusions and delusions, are their creators.

The custom of prayer is simply evidence of man's weakness and needs, and of the childish views he once entertained of the world and of God. As far as the needs remain, science will supply them under intelligent human effort. Thus, as the light of law advances, the illusions of the old spiritual world, and prayer among them, will vanish like ghosts at dawn. They will be simply outgrown.

In this view, this prayer discussion is of great practical importance. This delusion, if it be one, needs to be removed from the popular mind with all convenient speed. For the sure foundation of practical life is the general belief in the invariable order of nature. If this order can be varied, adjusted, or broken by God, or by the prayer of a man, then science and civilization are all at sea. We are remanded back to the age and the methods of the rain-maker and the sorcerer. The foundation of the future welfare of our race rests on the public conviction of the impregnable immutability of laws, and of the almost infinite modifiability of phenomena under them through human will and effort. There is no reliable basis for individual character or for society if these scientific convictions are destroyed or weakened in the popular mind.

To be deprived of pleasant illusions, or to deprive others of them, may be painful, but all scientists should sustain the highest conceptions of nature, of law, and of God, knowing that they bring their compensations. Says Goethe :

Painful truth! Yet I prefer her to pleasant error,
For truth will heal the pain she may oft inflict.

What, then, are the remedies of truth for prayer? That they will all become apparent at once is not probable. We must outgrow the use of prayer as we do other limitations of childhood—gradually, and by the aid of truer conceptions, ideals, and habits.

The higher integration will present its compensations. Space permits only an intimation of these. Confidence in a firm world of law, modifiable practically without limit as to phenomena and events, by the will and efforts of man for the benefit of his race, becomes the true basis of nobility of character. The infinite, the cosmos, and man become the sources of feelings, thoughts, purposes, hopes, and duties which are found to be inspiring, consoling, practical, beneficent, and religious in the highest degree, and which open up a new world. Habitual physical rest, and times devoted to the cultivation of our highest ideals and feelings, become a source of sweetness and light more sure than prayer or sacrifice. To these results, the lives of Spinoza, Goethe, Hume, Kant, Comte, Mill, Carlyle, Emerson, Harriet Martineau, George Eliot, and thousands who have discontinued the habit of prayer, bear abundant and practical witness.

Mother-wit is the cure for false theology, says Emerson, and it is sure! The bottom of the world, and of human effort and hope, is *infinite*. It is because we grow to newer and truer ideals, purposes, and hopes that the older, like the leaves, fade and fall. Those who do not see the new will proceed as of old, for no desire will disturb their illusions. Thus the law of evolution happily protects them from the light which might injure or blind. But those who see must fearlessly advance. As Professor Ernst Haeckel enjoins, *impavidi progrediamur!*

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NORTH AMERICAN REVIEW.

No. CCCXXII

SEPTEMBER, 1883.

STATE REGULATION OF CORPORATE PROFITS.

AT the time when the Federal Constitution was adopted, municipal government in America was a very simple affair, and was managed with ease and economy through local officers, who provided for the making and repairing of roads, looked after disorderly characters, abated local nuisances, and levied rates for the few and simple public needs. When the growing population of a particular locality appeared to need larger powers of local government, the legislature granted them, but they often involved little more than the holding of fairs as a means of building up local trade, the institution of a local court for the trial of petty cases, a few simple precautions against fires, the employment of watchmen, provision for the streets, and authority to levy taxes under very narrow restrictions to meet the corporate expenses for these purposes. State government was more complicated, but it was vastly less so than it has since become.

Changes, the most of which have taken place within fifty years, have made everything different. The railroad has come, for good and for evil, and has displaced not only the old stage-coach, but to a large extent also the use for trade and travel of the common roads. The State and its municipalities provide the common highway and keep it in repair, and it seems there-

fore to be within their authority if not their duty, now that the railway has become the chief convenience of travel and transportation, to provide that also. The use of coal gas has become common for illuminating purposes, and the proper police of all urban communities requires that the authorities should provide it, or something equivalent or better, for public streets and places. The telegraph and the telephone are to some extent superseding the post-office, and are quite as much a public necessity. The advance in sanitary science makes us acquainted with the dangers of imperfect city sewerage, and of impure water, and we are compelled to abandon the town pump, and to bring from a distance an abundant supply of pure water for domestic and public use. We also see the necessity of giving to the city population the opportunity of breathing pure air in parks which are shaded with trees and refreshed with fountains. Here are important public wants, every one of which is expensive, and must be provided for, if at all, at a cost of taxation which to our frugal ancestors would have seemed almost like confiscation.

When a public need is thus discovered or felt, the first question often is, whether it shall be met by the Government directly, and at its own expense, or whether the franchise of providing for it shall be conferred upon individuals, with the privilege of making it a source of profit. The former is the method which apparently is most consistent with republican institutions, for it grants no favors, and does not complicate individual with governmental affairs. But in practice it is found subject to very serious objections. We know what some of these are, for they have been confronting us for many years, and subjecting us sometimes to disaster and disgrace. The cost leads to great debts, and these are commonly great calamities. The management of railways, lighting works, the telegraph, or the telephone is a business, requiring in those who take it up not only a scientific preparation and training, but also the same attention, care, prudence, economy, and circumspection which in any private business are the requisites of success. Whether in the hands of a municipality such a business will be subjected to the proper management must depend, directly or remotely, upon the annual elections. These, when honestly conducted, with exclusive regard to the proper municipal issues, are by no means certain to bring to the front men of business energy and capacity, and when they do, are not sure to put them in the places most suited

to their abilities. But when municipal elections are, as now, conducted upon national issues, with which they have no concern whatever, we may take it for granted that the majority of those who seek and obtain the offices will not be men distinguished for their business qualities, or who have been found successful in the management of their own affairs. The public works of states and cities are, therefore, likely to fall into the hands of those who will not manage them with skill or with high business capacity. But what is worse is, that so long as the practice continues of making municipal offices and places the spoils of party warfare, it must be expected, and will certainly happen, that the dominant party or its local leaders will manage from the control of public works to derive profits for themselves at the expense of the community. There seems, therefore, to be strong if not controlling reasons, whenever the supply of a public convenience can assume the form of a private and continuous business, for permitting it to take that form, and for granting to individuals the necessary franchise for the purpose.

But to grant such a franchise is to give a special privilege which presumably has pecuniary value. It is therefore to prefer some citizens, who are made the recipients of the grant, over citizens in general; and though this is unavoidable, it is in a sense invidious. In many cases also, the privilege from its nature must be exclusive; and we are to have persons carrying on a business as a public agency, with the public as a customer, but without the competition which, in the case of ordinary business, is supposed to be the sole protection against extortionate demands. We thus have the odious features of monopoly, as the result of a grant of a public privilege; and this will be obnoxious in proportion to the opportunity it gives for unjust exactions, and to the neglect on the part of the State to provide against them.

But suppose the State, when granting the privilege, makes no provision against an extortionate use of it for the purposes of private gain, is it powerless to do so afterward? No question more important than this has hitherto demanded the attention of the country. If the State may grant irrevocable and unchangeable franchises of all sorts, we may find, after a few years of foolish or corrupt rule, that it has bartered away a large part of its ability to be useful to the people, and that, instead of existing for the equal and common good of all, it has built up privileged classes to whom the functions of government have

been granted or pledged. It would be easy to imagine a state of things that might become intolerable.

When the force, effect, or binding nature of a public grant, and especially of a corporate grant, is in question, we turn spontaneously to the Dartmouth College case for the light and the law that must guide and govern us. That case has tended to fix in the public mind the impression that whatever can be obtained in the form of a legislative grant has a property character affixed to it, which entitles it to common protection with the earnings of industry and the legitimate accumulations of capital, and that it also has something of the sacredness supposed to inhere in public compacts and treaties, and must be specially guarded for that reason. The decision has been extolled beyond measure for its preëminent wisdom and beneficence; and it has been assumed that without it the protection of contracts would have been impossible, and especially that the prodigious results of corporate organization, which has done so much to enrich and improve the country, could never have been attained. But if the Dartmouth College case brought blessings, it also created alarm; the corporations protected by it acquired a greatness, wealth, and power which the political instincts of the people made them distrust and fear; and in recent constitution making they have given distinct expression to the belief that a legislature with authority to tamper with corporate powers is less to be feared than a legislature with authority to grant irrevocable franchises and privileges. The revised State constitutions of recent date have therefore taken from the legislative department the power to grant corporate charters, except subject to the unalterable condition, as a part of the contract, that the charter may be altered or repealed in the legislative discretion; and that condition, in the case of nearly all recent corporations, is a part of the law of their being. It has been imposed under the influence of a fear that without it not only were corporations likely to become too powerful for effectual control, but also that the State was in danger of stripping itself for their benefit of essential powers.

There are still some charters, however, that, having been granted without the condition, are not subject to repeal or amendment at the legislative will; there are also important franchises in the hands of unincorporated persons. And in examining the State power to regulate charges, it seems necessary to consider it, first, as it would exist at the common law; second,

under charters not repealable or amendable; and, third, under charters which are subject to legislative control.

First. Of the corporations serving public ends, the most important are railways. These are chartered that they may establish the business of carrying for hire the property and the persons of those who may desire that service. This is a business well known to the common law, and has long been recognized as having a semi-public character which made it an exception to private business in general. The law permitted persons to assume the character of common carriers only upon certain conditions; one of which was that they should carry impartially for all persons. Another condition was that they should carry property at reasonable rates;* and, in the absence of special bargain, the law, when necessary, undertook to determine what might be reasonable rates under the circumstances. But, subject to these and a few other conditions, any one might offer his services as a public carrier; he needed no State permission for the purpose. And no doubt he might build a railroad and operate it in his business, if he could purchase for his track a right of way; but he would operate it under the same common law conditions which other public carriers must observe. He would therefore be under the restriction that his charges should be reasonable.

But legislative permission to build and operate a railroad is commonly a necessary requisite. Highways must be crossed and public places intersected or occupied; and a railroad upon any of these, without permission of the State, would be a public nuisance, and subject as such to indictment and removal. It becomes necessary also to resort to the eminent domain to force sales of lands for a right of way by persons who will not voluntarily part with them or who take advantage of the circumstances to demand exorbitant prices. But, in addition to other impediments to individual construction, the capital required for the purpose is so great that only the coöperation of many persons can secure it; and the safe and convenient method of coöperation is under corporate forms. We therefore, of necessity, have charters for railway companies.

* *Harris v. Packwood*, 3 Taunton, 264; *Oppenheim v. Russell*, 3 Bos. and Pul. 42; *Ashmole v. Wainwright*, 2 Q. B. 837; *Fitchburg R. Co. v. Gage*, 12 Gray, 395; *McDuffee v. Railroad Co.* 52 N. H. 430; *Johnston v. Railroad Co.* 16 Fla. 623; *Holford v. Adams*, 2 Duer, 471; *Streeter v. Railroad Co.* 45 Wis. 383.

If these companies received from the State nothing beyond the franchise to be a corporation for operating a railway, they would, when formed, become merely carriers of goods and persons under common law rules; and we need look no further to ascertain their duties and obligations. But they receive from the State many other franchises and privileges. They are permitted, as has been said, to have the aid of the eminent domain, and to occupy public streets and places. Sometimes they are favored in the matter of taxation; sometimes the power to tax is employed to aid them; and always there are exceptional rules of police for their convenience and protection. All these are special favors which they receive from the State to enable them to set up and carry on with profit their business as common carriers; and the inducement—if not the right—to grant them must be found in the fact that they are created to subserve public ends. It is quite certain that they could be given power to interfere with private property on no other ground whatever.

We have, then, railway companies existing as common carriers, and subject to the common law obligation to make only reasonable charges. But what are reasonable charges? Reasonable prices in general are such prices as are determined by demand and competition; and they do not necessarily lose their character as reasonable, because, under the pressure of demand and in the absence of competition, they become very profitable. If, therefore, a railway corporation is to be regarded as occupying in all respects the position of a common law carrier, large profits will not necessarily determine its charges to be unreasonable. But when the company receives from the State special privileges and grants of power, on the understanding that these are conferred in the public interest and to subserve public ends, it is not by any means certain that its profits may not justly be used as a test of the reasonableness of its charges. The charter is granted for the mutual benefit of the State and the corporators; and, while it contemplates reasonable returns to the latter on their investment, it cannot fairly be understood to contemplate anything more. In determining what are such returns, all the risks to which the investment is subject are to be taken into the account; and it is obvious that these are much greater than the risks which attend the loaning of money on security. But charges can only be regulated for the future; and this must necessarily be done, either by the company itself or by the State,

upon estimates of the business likely to be done and its cost. That the company could not be exclusive judge in doing this even at the common law has already been seen ; and as no third power can intervene except by mutual consent, it seems to follow of necessity that the State may limit profits as well as charges. The judicial decisions go to this extent, that when the State establishes a maximum of charges, these charges are to be deemed, *prima facie*, at least, reasonable.*

The case of corporations which are created to serve public ends, in new ways and by means of new inventions and discoveries, differs from that of railroad companies in this, that their business being new, duties and obligations of exceptional character have not been prescribed for them by the common law. A telegraph company, for example, is not a common carrier, and therefore does not come under the rules which control the carrier's business. But there is precisely the same reason why the State should regulate its business and keep its charges within the limits of reason that applies to the business of railways. The telegraph exists only by permission of the State, and is only constructed by the aid of the eminent domain. The main object in granting the aid is to promote the public convenience and welfare, by means of the telegraph as a public agency ; but incidentally and as a consideration for its service to the public, the company is expected to make a profit for its members. If the charges that are to produce this profit may be imposed at discretion, the State is at the mercy of the agent it has created ; the main purpose is subordinated to the incidental. There can never be any implication that this was the intention in any grant for a public purpose. A fair and reasonable use of the grant must always be understood ; and obviously what the public shall pay for the conveniences which the grant secures for it is matter of the highest moment. It is just as much within the proper police authority of the State to keep a telegraph company from abusing its powers in the matter of charges as it is to prevent other abuses. And this may be done in strict accord with the principles of the common law, and by virtue of powers which are inherent in every sovereignty.

* The Granger Cases, 94 U. S. Reports, 155, 164, 179, 180, 181 ; Shields v. Ohio, 95 U. S. Reports, 319. As to the elements of reasonable charges, see Pickford v. Grand Junction R. Co. 10 Mee. & W. 399.

Second. Where charters exist which have been granted without the reservation of the power to amend or repeal, the State must abide by the grant, and if it was improvident, must suffer the consequences. All that can be done is to see that the incorporators themselves observe the conditions of the charter according to its true intent, and if they fail to do so, to forfeit it. This is the rule of constitutional law, and it is also the rule of public honor and integrity.

Charters, however, are not often their own sufficient interpreters; and the question of construction in respect to the power to make charges and accumulate profits is often troublesome. The grant of this power is sometimes subject to a maximum limit; and, when that is the case, nothing which observes the limit can be deemed abuse. But more often the grant is either silent on the subject of charges—in which case the corporation by implication would be empowered to fix them—or it gives the power to the corporation in general terms, and prescribes no maximum. In the first of these cases, the right of the State to restrict corporate charges is unquestionable. In the second, though long and earnestly contested, it is now well settled. The ground on which it is affirmed is, that the State, in conferring upon the corporation the right to charge for the services rendered to the public, without expressly abdicating the power of control, must be understood to have reserved it. All corporate grants are to be strictly construed, and it must always be assumed that the State proposed to give nothing which it has not given in express terms, and that the grantees have bargained for and secured in express terms everything they understood they were to have. A railroad charter, therefore, which authorizes the company to establish such rates for the conveyance of persons and property as it shall from time to time determine by its by-laws, confers the power subject to the higher authority in the State to regulate the rates itself if the circumstances shall seem to demand its interposition.*

It may become a question at some future time whether an express grant to a corporation of the exclusive right to fix its own charges is not subject, like all other corporate franchises, to the implied condition that it shall not be abused. The penalty for the abuse of franchises is forfeiture by judicial proceeding

* *Ruggles v. People*, 91 Ill., 256, recently affirmed in the Federal Supreme Court; *Shields v. Ohio*, 95 U. S. Rep. 319.

at the instance of the State; and it is conceivable that cases of such outrageous extortion and palpable injustice might occur as would justly subject a corporation to this punishment. But the remedy being severe would be applicable in extreme cases only.

Third. Whenever, in granting corporate franchises, the power to amend or repeal at will has been reserved, the control of the State must be deemed practically absolute. It is of no importance that the charter confers upon the corporation the exclusive authority to fix its own charges, for the legislature may at any time revoke the grant or set limits to it. The incorporators have accepted it with the distinct understanding that they have only an estate at will in their franchises, and have consented to assume all risks of State power being exercised prejudicially. No contract is therefore violated and no faith broken when the State asserts its authority.*

It may nevertheless be a great hardship, and it may be fall the corporation as well when it is blameless as when it is criminal. If corporate powers are taken away on judicial forfeiture, the judgment determines that there has been corporate misconduct deserving it; but when the legislature acts under its reserved power, it is not necessarily to be inferred that any corporate misbehavior exists or is charged. Corporate franchises are granted on considerations of State policy, and they may be taken away upon no other reason than that the legislative view of State policy has changed. At one period, we deem it wise to create State banks of issue; at another, we look upon them as needless, and proceed to legislate them out of existence, even though we make against them no complaint of failure in duty. The reason is that we have discovered a better way.

But what is the effect of the repeal of a corporate charter? The franchise to be a corporation is gone, of course, but corporate property remains. If the corporation was a water supply company, there are the buildings and machinery, the pipes in the ground, the hydrants, etc.; if it was a railroad company, there are the rolling stock, the stations, the machine shops, and the track. In either case, what is permanently under or upon the ground,

* *McLaren v. Pennington*, 1 Paige, 102; *Crease v. Babcock*, 23 Pick. 334; *Miners' Bank v. United States*, 1 Greene (Iowa), 553; *Railroad Co. v. Sharp*, 5 Harr. (Del.) 454; *The Granger Cases*, 94 U. S. Rep.; *Shields v. Ohio*, 95 U. S. Rep. 319.

and valuable chiefly for use where it is, is likely to be of far greater value than that which is movable and which can be sold for use elsewhere. The corporation while in existence acquired the property and the right to use it where it has been placed; and any legislation which takes away the right to use it there according to the intent is practical confiscation. Nobody now disputes that the corporators, when their charter is taken away, retain their property, or that it may be subjected to the payment of corporate debts; but when the chief property value consists in the right to use what they have where it has been permanently placed, if the corporators can neither as tenants in common nor in any other capacity any longer use it themselves, or sell it to others for use, we shall be within bounds if we say that there are now within the United States several billion dollars' worth of corporate property, which, as against the action of legislative majorities, has no constitutional protection whatever. Even an amendment of corporate charters, by reducing rates below the cost of service, might be practical annihilation, and destroy not only the value of the stock but the means of paying corporate debts. This may in some cases be a necessary result of unfriendly legislation under the corporate system we have consented to adopt; but it must be conceded that there are serious evils in having any part of the property within the State with no protection but such as may be found in popular favor toward those who own it.

Chief-Justice Shaw said, in one case, that "Where, under power in a charter, rights have been acquired and become vested, no amendment or alteration of the charter can take away the property or rights which have become vested under a legitimate exercise of the powers granted."* He did not profess to decide the case then before him on this principle, though he held an amendment unwarranted which was made under full reservation of power. Afterward, in an opinion by his successor in the same court, it was decided that, while the legislature might, under its power to amend, authorize a corporation to undertake new and additional enterprises of a nature similar to those embraced within the original grant of power, if the act was accepted by a majority of the stockholders in the manner provided by law, it could have no such power without the acceptance, because the effect would be to alter the charter

* *Commonwealth v. Essex Co.* 13 Gray, 239, 253.

contract between the corporation and its members.* Possibly these are to be taken as indications that, even when the power of control is reserved in the broadest terms, the courts must, if possible, find some means of reconciling radical changes or repeals with the fundamental rules of right and justice.†

It ought to be said, however, that much of the legislation which would prove injurious to corporations has right and justice distinctly in contemplation, and is promoted in the sincere belief that the public good requires it. If mischief results from its adoption, it must be attributed to error in judgment or misinformation on the part of those who enacted it. Propositions to regulate the charges of railroad companies are likely to be of this sort. Legislators are likely to think just regulation easy and simple, and in the case of passenger traffic it may be found to be so; but the charges for the transportation of property are governed by conditions which no legislation can possibly change or control, and which railroad companies must observe whatever the statute may say. The law of competition in a country politically divided like ours is an imperious and exacting master; and statutes at most can only modify its operation, while pools at most can only prevent its operating disastrously. What is a fatal impediment to its control by law is, that the States and the nation have, in respect to it, a divided power; and while it is for the interest of the nation at large to encourage the competition which favors long hauls, it is for the interest of localities to make competition most active in short hauls. A State is therefore likely to favor legislation which compels proportional charges, or something near such charges, for all distances; but this, if it could be adopted and enforced, would preclude the great through lines of New York and Pennsylvania from competing at Chicago, St. Paul, and St. Louis in the grain-carrying trade of the Northwest, and would reduce such links as are wholly within a State, to the condition of mere local roads, compelled to make high charges or go into bankruptcy. But whenever State power should thus be exerted prejudicially, it can hardly be doubted that Congress would interfere, under its authority over interstate commerce, in aid of those competitive forces which

* *Durfee v. Railroad Co.* 5 Allen, 230.

† See *Shields v. Ohio*, 95 U. S. Rep. 324; *Sinking Fund cases*, 99 U. S. Rep. 700; *San Mateo County v. Railroad Co.*, decided at the Circuit by Mr. Justice Field, and now awaiting decision in the Federal Supreme Court.

silently but steadily have forced down the charges for railway service.*

It is not alone in the matter of railway regulation that law-making is likely to be ill-advised and detrimental to both public and private interests. The supply of public conveniences to cities is commonly a monopoly, and the protection of the public against excessive charges is to be found, first, in the fact that low prices generally extend the market, and, second, in the municipal power of control. Except in very large cities, public policy requires that for supplying light or water there should be but one corporation, because one can perform the service at less rates than two or more, and, in the long run, will be certain to do so. But scheming men make periodical attacks upon corporations existing for these and similar purposes, and with a popular cry for their watchword, they can always enlist local interest in their favor. If they succeed in obtaining a rival franchise, the subsequent history is commonly this: a war of rates for a season, and then either a sale of one franchise to the owners of the other, or a division of the territory, or an agreement upon charges. The final result is that the two supply the market at a greater cost than the one, and the additional cost is paid by the public. Whoever expects that a destructive competition is to be continued indefinitely must have a faith in the integrity and public virtue of local boards which experience scarcely justifies. The legislation which exposes a great property, invested in a public enterprise, to disastrous risks offers a direct temptation to irregular and crooked proceedings. If men solicit from a city council a franchise which they cannot legitimately make profitable, it is a natural inference that they propose either to use it as trading property or in some way to find their profit in the manipulation of future councils.

The true policy of the State is to give due and full protection to corporate property, and at the same time to insist on the

* In 1870, the average rate per mile for the transportation of a ton of freight over seven great lines of road radiating from Chicago was 2.227 cents. In 1880, it had come down by steady reduction to 1.090. On the Michigan Central, whose freights have been unaffected by legislation, the average charge for moving a ton of freight thirty miles is now about the same as the twenty-five cents which one expects to pay a truckman for moving a box of goods from one street to the next. There are roads in the country whose charters permit a charge of five cents per mile for passengers, but the exigencies of the business compel their managers to accept three.

faithful performance of corporate duties. It is no more for its interest to invite and encourage raids on corporations than it is to countenance vast corporate profits for which no adequate return is made. In some kinds of business competition will keep corporations within the limits of reason in their charges; in others it will not. When it will not, it may become necessary to legislate upon profits. If the business is simple, like the supply of light or water, this can be done by prescribing a tariff of rates; but sometimes a tariff of rates prescribed by law could only be mischievous. It would generally be so in railroad transportation of property, except in the case of mere local roads. Rates must yield and accommodate themselves to innumerable circumstances and contingencies, expected and unexpected; and these must be met and provided for by the governing power as they arise. No other known business requires larger technical skill, greater ability, or wider experience. And the ablest, wisest, and most experienced man would be guilty of an act of supreme folly, if, with ample power, he undertook to prescribe unbending rules for future charges. To prescribe tariffs of rates for one road, or the roads of one State, which the competitors are not obliged to observe, would be like prescribing in advance by law the movements of an army, while the enemy was at liberty to maneuver at discretion. Railroad competition is an earnest strife, if not a warfare; and experience hitherto has shown that all that can be done by common arrangements and understandings is simply to prevent the strife becoming mutually destructive.

T. M. COOLEY.

MUNICIPAL REFORM.

ARE our municipal defalcations, extravagances, and tax burdens irremediable? Have a hundred years of American experience taught us nothing? Can we be instructed either by our own history, or by three hundred years of the experience of the municipalities of modern Europe? It is to be regretted that no census will show us the amount of the criminal misappropriations of public treasure, or the aggregate of wasteful expenditure and wasted interest, under the head of municipal administration. But the census of 1880 gives the data for a comparative statement of public indebtedness and of its origin which is not calculated to provoke our mirth. It compares the indebtedness of each State, incurred for all purposes of State government, with the total indebtedness of its towns, incurred nominally for municipal objects. It is to be remembered that the towns burdened with this indebtedness form topographically a small section of the territory over which the State taxation is diffused, and represent only a portion of the resources on which the State relies.

STATEMENT SHOWING THE STATE DEBT, IN COMPARISON WITH THE CITY AND TOWN DEBT, OF EACH STATE IN THE UNION.

	<i>State Debt.</i>	<i>City and Town indebtedness.</i>
Maine.....	\$5,848,900	\$18,247,822
New Hampshire.....	3,561,200	6,390,593
Vermont.....	4,000	4,223,942
Massachusetts.....	33,034,726	87,223,947
Rhode Island.....	2,534,500	12,425,401
Connecticut.....	4,967,600	17,793,062
Total for the New England States	<u>\$49,950,926</u>	<u>\$146,304,767</u>

	<i>State Debt.</i>	<i>City and Town indebtedness.</i>
New York.....	\$8,988,360	\$217,825,069
New Jersey.....	1,896,300	43,934,721
Pennsylvania.....	21,561,990	100,054,742
Delaware.....	880,750	1,417,613
Maryland.....	11,277,111	21,255,842
District of Columbia.....		22,886,769
Total for the Middle States (with District of Columbia).....	<u>\$44,604,511</u>	<u>\$407,374,756</u>
Ohio.....	\$6,476,805	\$43,424,119
Indiana.....	4,998,178	9,246,419
Illinois.....		21,106,504
Michigan.....	905,150	6,436,300
Wisconsin.....	2,252,057	7,170,345
Iowa.....	370,435	3,910,398
Minnesota.....	2,565,000	3,714,440
Missouri.....	16,259,000	28,497,755
Kansas.....	1,181,975	2,856,566
Nebraska.....	499,267	757,173
Colorado.....	212,814	560,573
Nevada.....	75,396	132,000
Oregon.....	511,376	98,774
California.....	3,403,000	7,590,337
Total for the Western States...	<u>\$39,710,453</u>	<u>\$135,501,703</u>
Virginia.....	\$29,345,226	\$11,840,620
West Virginia.....		941,162
North Carolina.....	5,706,616	1,000,591
South Carolina.....	6,639,171	5,862,089
Georgia.....	9,951,500	9,698,863
Florida.....	1,284,980	1,055,636
Alabama.....	9,071,765	3,953,514
Mississippi.....	379,485	498,942
Louisiana.....	23,437,640	18,324,344
Texas.....	5,566,928	3,588,178
Arkansas.....	5,046,405	765,975
Kentucky.....	1,858,008	12,276,537
Tennessee.....	27,440,431	6,888,581
Total for the Southern States...	<u>\$125,728,155</u>	<u>\$76,696,032</u>
Total for all the States.....	<u>\$259,964,045</u>	<u>\$765,875,258</u>

Omitting fractions, it appears that in the State of Massachusetts the proportion of State debt to town debt is, approximately, as 33 to 87; in Vermont, as 0 to 4; in New York, as 8 to 217; in

New Jersey, as 1 to 43 ; in Pennsylvania, as 21 to 100 ; in Ohio, as 6 to 43 ; in Illinois, as 0 to 21 ; in Iowa, as 0 to 4 ; in Missouri, as 16 to 281 ; in California, as 3 to 7 ; in Kentucky, as 2 to 12. In the South generally the conditions are reversed ; although in South Carolina, Georgia, and Florida, the two classes of debt are about equal in amounts.

In the New England group of States, the proportion is as 49 to 146 ; in the Middle States, including the District of Columbia, as 44 to 407 ; in the Western States, as 39 to 135 ; and in the Southern States, as 125 to 76. In all the States, except those of the South, it is as 134 to 689 ; and including all the States, it is as 259 to 765.

Stating it roundly in another form, it appears that of the aggregate State and town debt in the New England States, about seventy-four per cent. has been created by the towns in their self-governing capacity ; in the Middle States, about ninety per cent. ; in the Western States, about seventy-seven per cent. ; and in the Southern States, about thirty-eight per cent. In the Southern group, the balance of extravagance and misrule seems to have been with the State governments. But when the comparatively small number and size of their towns is considered, the proportion of burden resting upon them is still very large.

We now see where and whence the greatest burdens of taxation fall. The most just as well as the most grievous complaints come from the local municipalities. Like the patient camel, they have felt the addition of weight to weight, and while uttering moans as the loading goes on, have been helpless to untie a single cord which binds the burden to their backs. They protest, and they appeal to the courts. Justice tells them a contract is binding, and that the fault is their own ; or, if of doubtful legality, that the innocent holder of their bonds has higher claims to protection than those who elected the mismanaging authority. The majority of electors bind the minority, though the latter may pay four-fifths of the taxes. And so the tax-eaters, aided by some small tax-payers, may create the debts, and bind firmly the burden to the shrinking shoulders of the debt-payers. When the expenditures have been made for legitimate objects, such as the improvement of streets, paving, bridges, sewers, etc., under the present system the work is often done so recklessly and irresponsibly, that the construction has ceased to

exist, or has required reconstruction, before the maturity of the debt which was originally incurred for it. There is neither effectual inspection nor rigid accountability. The contractor has pocketed his money in haste, and the municipality repents at leisure.

This vast aggregate of debt has been accumulated in some of the States subject to a constitutional or legislative provision which limits the total of municipal indebtedness to five per cent. of the valuation of taxable property; and also to legislation which establishes a maximum rate of permissible taxation. The former rule has in places been defied, and at times evaded, by political greed, which has so raised the valuation as to satisfy its lust within the lawful rate of assessment. Where political favoritism and official peculation have run wanton, and thievery has become too bold by success, private association outside the legal functionaries, who were themselves chained to the car of the corrupt mob which controlled their election, has inspired and organized successful revolution. But this once done, the reforming association dissolves, vigilance ceases, the wrath of virtue is appeased, while vice again in silence prepares its campaign in club, or caucus, or primary, and advances with stealthy movements upon the abandoned lines. Vicious politics are ever vigilant, while public virtue is only aroused by a blow in the face. Self-interest is so keen-eyed that its wedge finds the smallest crevice which may be widened. Public interest becomes aware of it only after it has stumbled into the chasm. The constant element in municipal affairs is the unremitting desire of the politician to gather masses of votes, and of the contractors and placemen who furnish them to prey upon the city treasury. The people who do not pay are always ready to create debts against the people who must pay. They who do not pay the piper are ever ready to dance to his music.

There is radical error somewhere in the general municipal system. From time to time the right sense of the community is shocked by announcements of peculation and waste of municipal funds and mismanagement in the affairs of cities. Our leading towns have had experience of the iron grip of a "ring," usually composed of politicians of local fame, who have surrounded themselves with a force of party organizations so strong as to defy the efforts of honest citizens to dislodge them. At times they have been strong enough to hold courts at bay, at

times have controlled the local elective judiciary, and have even shut their gates against regular processes of law. In the most remarkable case in our annals this pillage of public funds was only revealed by an independent press, and punished by the slow but firm uprising of an indignant community, which usurped the duties of the regular officers of the law. Yet, while these words are written, the same city discovers another conspiracy of officials, by which \$169,000 is pillaged from its treasury.

Nor has this been the only remarkable feature of our municipal history. In compliance with all the forms of law, our municipalities have occasionally been bankrupted by reckless extravagance in incurring liabilities. To communities as well as to individuals come periods of exuberant self-confidence, in which the spirit of speculative extravagance seizes the people, and a fever of borrowing takes possession of the masses. Unjustifiable works are undertaken; pay-day comes, and purse and credit are both exhausted. Then the disgrace of repudiation is added to financial dishonor. These results have appeared even where the law has required a popular vote to ratify a proposed debt. Where bankruptcy and repudiation have both been avoided, our towns have often struggled for years in adversity, groaning under burdens of assessments, which have destroyed their prosperity, checked their growth, and turned to regions less afflicted with taxation a tide of wealth and population which would have enriched them under a safe administration.

The eyes of the Argus of Party watch the National Government. Even incipient evil is there detected, challenged, exposed, and stifled. Criticism is so swift that it often assails the possibility of fraud before it exists. The legal forces of the nation are very active and vigorous, never so much so as now; and they spare neither political friend nor foe. In a less degree the several State governments are vigilantly watched, and fraud and mismanagement have at most a brief and spasmodic development. The sense of financial honor among the States—a few exceptions reserved—has in late years advanced with great strides. Political partisanship no longer dares to defend crime, nor to shield the criminal, nor to accept a sham as the performance of a contract. But the nearer we come to municipal self-government by popular vote, the more apparent become the evils of peculation, fraud, and maladministration. Vigilance is reduced to a minimum. Daily personal association lulls suspicion.

Suspicion goes abroad with open eyes, but sleeps at home. Shabby work is done in the absence of authoritative inspection. The voter grumbles at a State tax of two and one-half mills, as in Iowa, while the wastefulness and extravagance of the officials of his own municipality load him with a local taxation of thirty, forty, and even fifty mills on the dollar. Party responsibility and party watchfulness are not well maintained in cities, or exist with greatly diminished vigor. Hostile party managers are often sagaciously admitted to a share in the profits.

In the smaller towns, the official prizes are not contested except by a grade of men who have small stakes in the towns, or none at all,—often by men who do not own a town lot nor pay a tax. A mayor of that class rewards with the subordinate offices the associates to whom he owes his election. The more the grade of officers is lowered, the more unwilling are responsible citizens to accept the municipal offices. The mischief breeds in and in. The local press is often brought into alliance with municipal party robbers.

But even when such officers keep within the law, there remain their want of real interest in the prosperity of the town, and their ignorance of the methods by which a city secures a solid growth, with economy in its development. Bridges, culverts, and sewers are built for the profit of contractors, and are swept away by the next flood. Speculative pavements are laid for which bonds are issued, and they decay or break up before they are paid for. Wild contracts are entered into, binding the city with irreversible force for twenty or thirty years, for some speculative gas-works, or water-works, or railway liability. The city suddenly fills its lawful margin of indebtedness. Indispensable appropriations then become unlawful, injunctions are issued, financial dishonor follows. Our experience in these respects furnishes so many illustrations that no argument is required to convince men of the need of municipal reform. The municipality is now the most wasteful department of our entire civil organization.

All efforts hitherto made—save one—to protect the public against municipal misrule have been limited to the surface of the organization. They have been directed to one of two objects—either to shift responsibility from one set of officers to another, or to diminish the aggregate of their powers for mischief. The relief afforded by the former must be temporary so long as the

evil lives in the motive force behind them. The latter remedy is effective only to the extent of diminishing the scope of the mismanagement and the amount of waste. It does not cure the evil nor destroy its living roots. The evil principle lies in this, that elected authority is nearly independent of proper responsibility. The party that creates the liability is not the party that supplies the funds. The party in real interest is not the party really in control. One disburses at will the money which the other is compelled to raise. It is an association of citizen stock-holders, where the owners of a minority of the stock control the majority of ownership and interest. There would be little demand for shares in any insurance or banking company managed on that principle.

If we can clear the ground of the existing system, we may be able to find the solid basis of a safe municipal organization.

The unit of our civil society is the town or township. Originally, every resident therein was identified in interest with nearly every other resident. The small population had little diversity of interest. The great majority had indeed identity of interest. A town meeting settled questions of policy. Individual equality of control rested on community of interest and responsibilities. This condition was outgrown with the growth of population. The Legislature then granted charters prescribing the limit of local government, and authorizing in larger towns a chosen body of men to perform all the civil functions of the locality. All citizens were electors of this body, because there had been no development of such diversity of interest and of motive as to disclose the financial danger in which the minority of numbers might be placed. As the danger was more and more revealed, two separate bodies were provided for and elected by divisions of the same general constituency, the one to be a check on the other, and to secure deliberation before action. But perils still revealed themselves, and a limitation on their authority to create liability and to impose taxes, as well as making certain officers non-elective, was enacted by the sovereign legislature. At this point began the conflict between the irresponsible majority of numbers and the responsible majority of interest, the former clamoring for complete sovereign self-government by numbers, the latter for protection against it. The war is now at that stage of the debate.

Certainly, universal suffrage is our rule of political government. It is justly applied to State and nation in their respective supreme legislative and executive functions, because the universal scope of sovereign law and its administration embraces all classes, even criminal and pauper. But a city is a subordinate creature of the law, without sovereignty, without power to declare a crime or to fix its punishment; without army, navy, or militia; without power over civil rights or liberties. It is a corporation, more resembling an insurance or manufacturing corporation, than a political government. It has only partial power, under general laws imposed upon it, to regulate its own affairs, and for the special security and promotion of its own material interests. It is a simple business organization, in which some citizens have invested much more largely than others, and where some have not invested at all. A mayor of Boston has said that the residents of that town who pay nothing beyond a poll-tax constitute a majority of its voters. In such cases, is it right that the major part of universal suffrage should create the city's liabilities and control its destinies? Should they settle its taxes, make its debts, control its line of improvement, fix the condition of its trade, and fill and empty its treasury? They who pay no taxes on real property, or personal or business interests, are usually a transient population, without either an interest or a disposition to care for the future progress of the town. The only municipal function which concerns them is, perhaps, the school and sanitary regulation; and in these there is no diversity of interest between them and the permanent classes of the population. If it is a question of improving the city and making it attractive, no one is so much interested in this as the permanent tax-paying people whose homes and property are pledged to its prosperity. The divergence of interests begins precisely where useful disbursement ends and extravagance and waste enter in. Those who profit by this are not the persons who pay for it. When one laughs, the other weeps. The latest illustration of this is seen at Elizabeth, N. J. The same experience, unripened, is going on to-day in a score of other towns.

The principle of universal suffrage rests upon the general community of civil rights and liberties, of interest, and of civil liabilities. Each man, as one may say, owns stock in the national and State sovereignty. But civil rights, liberties,

punishments, are eliminated from the sphere of municipal organization, because they are all regulated by a higher authority, and cannot be diminished or changed by a non-law-making municipal corporation. Suffrage here should therefore be controlled by the latter two conditions—community of interest and of liability. Non-tax-payers, and payers of a poll-tax only, have no civil interest which demands equality of representative force in the municipality; no just interest whatever which is not represented in the same or greater degree by the tax-payers generally; and no interest at all which is affected by liabilities created against the corporation. Represented or not, city expenditure is for them a matter of no concern. The maxim which joins representation to taxation leaves them outside in its application to municipal affairs. We here find a sound principle which would justify a limitation of municipal suffrage to property-owners and to the payers of taxes, who are affected by the liabilities to be created and by the expenditures within the municipal jurisdiction. This points the way to one method of municipal relief.

Mr. Madison, in his letter to John Brown, touching the proposed Constitution for Kentucky, said: "I see no reason why the rights of property, which chiefly bears the burdens of government, and is so much an object of legislation, should not be respected as well as personal rights in the choice of rulers." He was, therefore, disposed to narrow the right of suffrage in the choice of one of the legislative bodies of the State, and to enlarge it in the choice of the other. He was still more explicit in his "Remarks on Mr. Jefferson's Draught of a Constitution for Virginia." Touching electors, he writes: "The first question arising here is how far property ought to be made a qualification. There is a middle way to be taken, which corresponds at once with the theory of free government and the lessons of experience. A freehold, or equivalent of a certain value, may be annexed to the right of voting for senators, and the right left more at large in the election of the other House. . . . This middle mode reconciles and secures the two cardinal objects of government—the rights of persons and the rights of property. . . . It is now observed that in all populous countries the smaller part only can be interested in preserving the rights of property. It must be foreseen that America, and Kentucky itself, will, by degrees, arrive at this state of society; in some

parts of the Union a very great advance is already made toward it. . . . Liberty, not less than justice, pleads for the policy here recommended. If all power be suffered to slide into hands not interested in the rights of property, which must be the case whenever a majority fall under that description, one of two things cannot fail to happen : either they will unite against the other description and become the dupes and instruments of ambition, or their poverty and dependence will render them the mercenary instruments of wealth. In either case, liberty will be subverted ; in the first, by a despotism growing out of anarchy ; in the second, by an oligarchy founded on corruption."

If this sage of the Virginia sages could find occasion ninety-eight years ago for such a discrimination in suffrage, as applied to State governments, with what boundless reënforcement does it apply to the more dense population, and to the more facile combination of interests, in our cities to-day. "Dupes of ambition," or "mercenary instruments of wealth,"—let several of our cities between the Atlantic and the Mississippi look into this mirror.

In some of the cities of the Old World the local suffrage has been for generations limited by a municipal citizenship, quite independent of citizenship of the State. A man may there be clothed with all the rights of a national citizen, may have great riches, may be fully protected as a resident of the town of which, nevertheless, he is no "citizen." The city alone has the power to confer local citizenship upon him. It is in some cases valued at a certain amount in money, upon the payment of which he is by municipal vote admitted to equality of citizen rights. In some cases, the city has so successfully managed its corporate affairs that its municipal property not only pays all its expenses, but furnishes an annual surplus to be distributed as a dividend among its lawful citizens. To be a citizen there is to hold an equal share in a dividend-paying corporation. Imagine such a spectacle among American cities !

There are other methods of reform less precise and less clear in their effects, and which rest on a compromise of conflicting principles.

Our present system ignores the majority of interest, and vests the control in a mere majority of numbers. The resident who comes in to-day, and will leave after twelve months without investment and without paying a penny of tax, exercises an equal

control with the mechanic whose life is spent in the town, whose homestead is compromised by taxation, and whose whole fortune hangs upon municipal prosperity. The statement of this principle is its condemnation. But the local political manager, who finds this floating vote the cheapest and most facile, adheres to the system, and demands the perpetuity of universal suffrage in application to the local affairs of towns, in the manipulation of which he realizes the contents of other people's purses. We must reckon on this practical, though not insurmountable, obstacle to the principle of reform first stated. The ruinous principle to be expelled from the business management of our cities, full of floating voters, is the rule which gives to a mere majority of irresponsible numbers the right of control over the municipality. This majority elects alike mayor, aldermen, and councilmen, and many other officers, in some cities including the judicial officers. They have stricken down the one conservative barrier which our fathers carefully preserved—an independent judiciary. The result has been increasing disrespect for the administration of justice and growing disregard of law. A non-elective judiciary should be a part of every scheme of reform. The most extreme method of reformation within our experience was adopted by Congress for the national capital, when, during the reign of universal suffrage, it was brought to the verge of bankruptcy by the customary process of popular self-government. The entire city organization was abolished, and its powers vested in a board of three commissioners, appointed by the President, and acting under general legislative control. In practice, one of the three is non-political, a professional engineer; and of the remaining two, one is taken from each political party. The result has been a perfectly honest financial administration, restored credit, praiseworthy contracts, careful inspection, and general contentment and safety on the part of citizens. The one fault is in the police, in respect to which the commission is fettered by a foolish law. But it is questionable whether, aside from city place-hunters and contractors, one citizen tax-payer can be found who would return to the old system of self-government by unlimited suffrage. It is now one of the cleanest, healthiest, and best governed cities in the world. Every city government should be non-political, if law can make it so. There is no more justification for bringing politics into its administration than there is for introducing that element into a mutual insurance

association. It would soon be eliminated if the control were thrown into the hands of the responsible tax-payers, whose great interests are the security of person and property, the suppression of crime, the promotion of education and virtue, and the development of prosperity. The political departments of the Government require political parties. The municipal administration needs only capacity and integrity, from whatever party these qualities may be gathered.

But no State government would resort to the Washington method, unless in a case of extreme disorder and bankruptcy. Keeping to the elective basis, and to the usual organization, with mayor, aldermen, and common council, who should have the rights of electors? On this question, it is presumed, turns the entire problem of genuine and lasting municipal reform. The unassailable principle is that of taxation and representation of interest in profits and losses; that is to say, a taxation variable with municipal expenditures and liabilities. All such tax-payers, and none others, are share-holders in the corporation, suffering from its liabilities and profiting by its prosperity. On every just principle theirs is the voting power. If you question even their right of equality in elective force, the answer is that there is no difference except in degree of right, and that difference cannot be wholly evaded in dealing with masses of men. Within that principle, however, the plan adopted in Vienna is also possible here. The whole body of electors may be divided into three classes, each electing an equal number of representatives in the board of aldermen and council. The land-owners paying annual taxes exceeding \$—— may elect one-third; other proprietors, manufacturers, merchants, paying over \$—— in annual taxes, may elect another third; all other tax-payers, to whom may be added the professional classes, householders and others, may elect the other third. The whole body of municipal representatives so elected may meet in convention, and by a majority elect the mayor. Such classification may be made even where universal suffrage is continued. In that case the tax-payers would still have the control, as they ought to have, by their power to elect two-thirds of the governing body. Every interest would be represented, while non-interest could not, as now, control by virtue merely of numbers.

Whatever the limitation or classification of municipal suffrage may be, it is certain that any effective and permanent prin-

ciple of reform must be applied directly to this source of the evils. Here is the breeding-nest of municipal speculation, corruption, waste, and extravagance. Here is the dark cavern of vicious politics, the lying-in asylum of illegitimate politicians, the nursery of corrupt practices. Purify this, the muddiest of our political fountains, and the broadening stream will flow more purely all the way into the most important departments of civil government. It will secure a better local administration of justice, a better inspection of all public work, and a more vigilant police. It will promote temperance, establish economy, uplift public honor, and restore public virtue to its rightful supremacy.

JOHN A. KASSON.

CLASS DISTINCTIONS IN THE UNITED STATES.

TO SAY that where there are no classes there can be no class distinctions, and that in the United States, as no classes are recognized, either by law or by established custom, class distinctions are impossible, may be obvious and trite; but in the eyes of many persons, not unintelligent nor yet unthoughtful, it is far from being superfluous. From some of our publicists, notably from some of our most widely influential journalists, protest is frequently heard against the word "class" when it is applied to the various elements of our society. It is denied, in a tone of asperity and resentment, that we have such distinctions as classes of people. Nevertheless, the word, or the phrase, is used with a continuousness which is almost incessant. We read daily of our "wealthy class," our "professional class," our "laboring class," our "cultivated class," and the like, but strangely never, in seriousness, of our governing class; although within the last forty years we have received, as the boon of Democracy and circumstance, in our professional politicians, a body which comes nearer to being an established class, and a governing class, than any other, findable and definable, within our borders. And in a North-western newspaper—of all quarters!—I have met with mention of higher classes, and, verily, of high rank, in such a paragraph as this: "Most of the dailies [newspapers] are prepared for the higher classes; and thus emanating from men of high rank, and going toward the best part of the public, they are probably worthy of more praise than blame."

This is puzzling; and the more is it so because it comes from a writer whose articles are rated above the level of ordinary editorial work, even in what are called leading journals. What does such language mean? Plainly, its most important words have not either their inherent signification, or that which is attached to them by good usage, or even by common usage. To

say absolutely, and without qualification, that certain views are set forth, or certain publications made, by men of high rank, means, in English, that the men thus characterized are of a high established social grade; but that it was here intended to claim such a position for journalists is hardly among the possibilities of Western extravagance. There is no room for doubt that what was really meant was that the writers for most of the daily newspapers were men of a high intellectual grade; an opinion which will not lack a large journalistic concurrence. But what are those higher classes for whom these journals are prepared? and what is that best part of the public toward whom the emanations of these high intellects tend? I cite this paragraph, and thus comment upon it, with no fault-finding purpose, and only as an occasion and an ensample. The inquiry as to the meaning of the words used is no mere exercise in verbal criticism; for the confusion and the dissension in regard to this subject arise chiefly (as confusion, misunderstanding, and consequent dissension are apt to arise) from a misapprehension of the true meaning of words, and a use of them by two or more parties in differing and incorrect senses.

The indignant denier of the existence of classes in the United States is very right as to what he means, but very wrong as to what he says. For, until both man and society are something that they are not, and never have been, the one must fall into classes in the other. It is difficult to imagine a society in which there are, rightly speaking, no classes. To find such a society in a stage of development above the rudimentary is impossible. The African negro and the aboriginal American are the highest representatives of a society in which there are no classes. For what is a class in society? Let us go for our definition to an "American," one whose democratic sympathies were of the strongest, one whose authority in definition is of weight. Webster says that a class is "a group of individuals ranked together as possessing common characteristics; as the different classes of society; the educated class, the lower classes." This is his latest definition, which is better, although not greatly, than that in his edition of 1828: "A number of persons in society supposed to have some resemblance or equality in rank, education, property, talents, and the like; as in the phrase, all classes of men in society." The improvement consists chiefly in the elimination of rank and talent as distinctions of class. For, in a democratic

society, in which there are no ranks, there may be, or, rather, must be classes; and in aristocratic societies we see, unhappily too often, that talents do not accompany rank. Indeed, what is plainer than that talents, as the gift of nature, are, like her other gifts, distributed indiscriminately as to ranks and classes, unequally as to individuals?

Assuming that no rational person will assert that any form of society can exist without groups of individuals who may be ranked together as possessing common characteristics, and that therefore there must be classes of society, even in the United States, we may yet admit the justice of the often heard protest against their recognition, when we discover what the protesters have in mind. They do not mean classes: they do mean established and privileged classes. There are in the United States no classes of men born, none formed, none recognized in any way, who have the right to do any conceivable thing, to do which all other men have not the right. In England, for example, there is a certain class of men who are born to a position as legislators; and this class forms a part of a much larger class born with the right to go to court; and there are certain occupations, which, of themselves, exclude from court those who follow them; and there, too, men have certain rights of precedence which are not only recognized, but which can be enforced. In the United States, on the contrary, all citizens have equal rights in the executive residence of their governors or their president; there is no rank but that of superior and subordinate in the military or civil service of the people; no precedence except that which is voluntarily awarded to position, to merit, to age, or, by the graceful deference of strength, to sex.

The distinctive quality of society in the United States is equality. It is not liberty; still less is it fraternity. Our social and political structure is peculiar among those of the principal communities of the civilized world, not in that here all men's rights are protected,—far from it,—but in that here all men's rights are equal, and not only equal, but absolutely the same. And this equality, or identity, is what the “average American”—be he Irish or German, or born here of Irish or German parents, or of parents native but indefinable—chiefly values. Deny him fraternity if you will; take from him liberty or even property, by form of law, if you can; but leave him equality, and he is measurably content. He asks not the insur-

ing and maintenance of that liberty which is his because he must respect the rights of others; he demands that no one shall have rights or "chances" that he has not. The political boss, with his swarm of unclean followers, may deprive him of all that is vital and valuable in political liberty; corporations and monopolists may rob him, under the forms of purchased law, of his property, of his very house and home, of his comfort, and of all the beauty of his life; and not only will he not resist, he will not protest, if only he is secure in his equal right to deprive, if he can, all other men of their liberty, and to rob, if he can, according to law, all other men of their property; and that, having done so, he also shall be a magnate, merchant-prince, railway lord, caucus king, or what not. But there is no such if; none such possible or conceivable. Absolute equality in all things, and as to all things, right or wrong, good or bad, is the cement of that simple structure, society in the United States.

But the word society is used in two senses—one political or municipal, the other social or company-able. It is as to society in the former sense that the "average American" insists upon and has, in absoluteness, this equality. Socially, he will have none of it. His leveling there is a leveling down, not a leveling up; except in his own person. In that regard he does not believe that "one man's as good as another, and better too," unless he is the one who is the better. Since civilization began, the social world has seen few such changes as those which have taken place in the society of the United States during the last sixty years, and chiefly during the last thirty; and among these changes the chiefest visible is the bent toward elegance of every human creature whom fortune or exertion has raised above the primal cares of life. Not comfort, not even the substantial elements of luxury, are sought with that universal rage which is shown for elegance of outward seeming. In all that lies upon the surface this is visible; in our theaters, for example. Our fathers sat in dingy houses and on hard benches, looking upon scenery never beautiful, rarely correct, often shabby, and upon actors whose dresses were like the scenery; but night after night they might see, in stimulating and instructive alternation, the works of the best dramatists in the language acted with such ability and completeness that they could be enjoyed, if not always in all the parts admired, from the rise to the fall of the curtain. We sit in theaters which are themselves a splendid

show, and every box in which is fit for a king, looking upon scenery beautifully painted and carefully studied, and costumes which blaze and bloom upon the stage; but we in vapid plays have vapid acting; and one or two of these poor weaklings will run through a whole season at one theater, and sometimes one through two seasons. The change has been made simply to satisfy and please the public: there is no other motive. If managers saw that plays of dramatic and literary merit—acted by companies of clever, well-trained artists, in houses not dingy, but plain, clean, and comfortable, and with such scenery and costume as sufficed to remove the action from every-day associations—would attract the people upon whom they depend for support, such plays, so acted, in such houses, they would give. No man spends more time, trouble, or money in his business than are necessary to make it successful and profitable. Shakespeare did not, we may be sure.

The audiences assembled by these shallow, vulgar plays, showily presented in these splendid houses, differ from the old audiences just as the new spectacle differs from the old. In former times, the first row of boxes—dress-circle, it was called—was filled, and except on occasions of unusual attraction moderately filled, with elegantly dressed men and women of more or less pretensions to “fashion”; while the pit or parterre (now absurdly called the parquet) and the upper boxes were occupied by a respectably dressed crowd, intent only upon enjoyment of the performance. Now, unless one of these vapid plays fills one of these gaudy houses, “parquet,” boxes, balconies, and so forth, every night for months, or at least for weeks, it is regarded as a failure; and all the people who make its success are clad in fine raiment. Moreover, it requires but a little observation to discover in all of them a certain subtle consciousness of manner, which reveals a pretension to be elegant. Whether this elegance is even skin-deep, whether the superior quality of their apparel strikes in at all below the surface, and whether they are able to buy with their wardrobes the refinement of which they are intended as the outward sign, are questions which may here be left unanswered and unconsidered.

What is true of the theaters is true of all places in which the public of our day and country may be observed,—streets, hotels, and churches. Everywhere there is the same approach to equality

of seeming; and everywhere the objective point is the same—external elegance.

The causes of this are not far to seek; they are simply two—sudden wealth and democracy. The spirit of democracy had not thoroughly penetrated the people of the United States until the first quarter of the present century had passed. Up to that time the social habits and influences of the old colonial days were prevalent, although with slowly diminishing power. Until that time there was still a deference in the mass of the people for a class which, partly by culture, partly by character, and partly by such moderate possessions as were then called wealth, were the acknowledged leaders of society. The administration of Andrew Jackson may be regarded as the period when this feeling of deference disappeared, except in the slave States, where it was preserved by the effect of the “peculiar institution” of those sovereignties. Soon after the year 1830, the people of the Northern or free States became to all intents and purposes homogeneous. And yet from that period they began to be, in one important respect, year by year more heterogeneous; for then began the flood of foreign immigration. The thousands and hundreds of thousands of strange people thus added every year to the population of the Northern States were not only without education of any kind in mind, in morals, and in manners, but without any knowledge of the country into which they were received, with a merely nominal probation, as citizens. They knew no more of its history or of its society than the world at large knew fifty years ago of those of Japan. Moreover, they had been suffering from poverty and oppression, and they came here to find plenty and freedom. “What do you mean?” said a lady, some years ago, to her servants who rebelled against a proposed restriction of waste in the kitchen. “You know that you never saw meat once a week at home?” “Sure, mim,” was the reply, “and didn’t we coom here to git mate ivery day, an’ three times a day if we cud?” These immigrant peasants clutched eagerly at all that they could get; and chiefly they clung to something other than plenty and freedom, which they found, and perhaps had not expected to find—equality. They soon discovered, what was discovered about the same time by the mass of the people in the Northern States, that in a pure democracy there is practically no difference between man and man other than that which is made by the possession of money. That apart, all men are equal.

Character, culture, breeding, learning, talents, may be of importance to the individuals who possess them, and to their immediate friends and acquaintances; but unless they produce money they are "caviare to the general." The mass of "Americans," native-born and foreign-born, arrived at the point where they now stand,—the appreciation of all men, themselves included, solely according to the number of dollars under their control. Needless to say that to this there were and are some exceptions; needless, too, that they were and are so proportionately few as to be in the main of no account whatever.

Then the great West was opened; California was discovered; petroleum; railways were necessary; and, beyond necessity, the great schemes of railway speculation were formed. The country, prosperous before, began to grow rich with a rapidity unprecedented. Upon the thriving possessors of half a continent, who were just "realizing" the capabilities of their situation, came the great civil war, which, after a four years' struggle of blood and blunder, preserved the unity of the Government and destroyed the social and political constitution of the Southern sovereignties. It had one other important consequence: absolute equality and identity of personal rights was established throughout the United States.*

The South had fought to maintain an inequality of personal rights and an aristocratic form of society. The North had fought, not in a crusade for equality and against aristocracy, but for money; for the riches which it had acquired, and that the newly developed means for acquiring riches might not be destroyed; for nothing else. After the first flush of enthusiasm caused by the bombardment of Fort Sumter—"firing on the flag"—had subsided, before which no insult, no defiance, and notably, very notably, no enthusiasm for liberty and equality had been able to awaken enough fighting spirit in the North to lead the administrators of the Federal Government to take any important steps for its preservation,—after this excitement had subsided, and yet the war must needs be prosecuted or the Government be destroyed, the contest became one of money for the

* And yet, before this article goes to press there comes from the United States District Court of Texas a decision which surely cannot surprise any unbiased student of the Constitution, that the Fourteenth Amendment is unconstitutional, because it trenches upon the expressly reserved rights of the States.

sake of money. The war was virtually carried on by the moneyed men, the business men, of the North. They furnished its "sinews"; and this they did for their own purposes and in their own interests. Many of them grew rich by means of the war; most of them saw that in its successful prosecution lay their future prosperity. The war time was a money-making time, and the war was a money-making process. The Federal Government was victorious simply because it had the most men and the most money on its side; and it had the most men because it had the most money. The Confederate cause failed simply because its men and its money were exhausted; for no other reason. Inequality came to an end in the South; equality was established throughout the Union; but the real victors were the money-makers, merchants, bankers, manufacturers, railway men, monopolists, and speculators. It was their cause that had triumphed under the banner of freedom. General Grant has been roughly handled by caricaturists and paragraphists as a beggar. Verily, his reward has been small at the hands of those to whom he rendered his chief service. If the business men of the North had given him an income of one thousand dollars a day, and General Sherman one of five hundred, they would have insufficiently acknowledged what those stubborn soldiers did for them.

After a comparatively brief period of dull reaction, the country started again upon its interrupted course of prosperity with an impetus that was like the force of a continuous explosion, and with results the semblance of which the world till then had never seen. The exhaustless material wealth of the country, and the rapid increase of its population (the influx of immigrants keeping, on one hand, production strained to its utmost, and augmenting, on the other, the productive power); the failure of Europe, and particularly of England, to supply its own demands for food; with other forces which need not be here set forth,—combined to pour a flood of riches into the United States so vast, so diffusive, so splendid, and at the same time so solid, that we became the Dives of nations. History records no such swift, substantial growth in material prosperity as that of the United States during the last fifty years, and chiefly since the civil war. Men who twenty years ago had nothing have now hundreds of thousands of dollars, millions, tens of millions. And the numbers of those thus suddenly enriched are not hundreds, not thousands or tens of thousands, but hundreds of thousands; while around them are thriving millions in a condition of firm

comfort. Upon such a spectacle the sun of prosperity never shone before. Of these men, and of the women who belong to them, very few, in proportion, would be regarded in any other country as educated, still fewer as persons of intellectual or social culture. They have money; nothing more. The result of the forces which have been in operation in this country during the last generation has been to give to this vast multitude two things—unprecedented wealth with absolute equality, likewise without precedent.

It is not in human nature that such a course of events, with such consequences, should be without effect upon the social bearing and seeming of the people among whom it has occurred. And in the present case, the effect of such a sudden increase of wealth has been greatly enhanced and much modified by the influence of foreign example. Europe comes in as a factor in our social problem. It is quite within the limits of truth to say that, for ten "Americans" who visited Europe fifty years ago, a thousand have done so within the last ten years. The effect of this intercourse has been in some respects advantageous; in others, rather deplorable and even ridiculous. For, of these purse-filled tourists, the number who were by nature or by education prepared to receive the benefits of European travel was so very small that in the great mass they were of no account. And, unfortunately, what they sought in Europe was not that instruction and that refinement of taste which Europe is qualified to give: they went either "to have a good time" or to rush through picture-galleries and cathedrals and scenery, that they might come back fitted to set up as people of travel and of culture. But whatever they may have failed to acquire of Europe's long-stored social and mental wealth, few of them failed to learn to imitate the least admirable of the manners and customs of Europe—those which lay upon the surface; those which might be gathered from a superficial observation of the most pretentious and most frivolous society, the only society in Europe to which such casual travelers or such transient sojourners would be admitted. The pitiable spectacle of the American colony in Paris during the Second Empire may be passed over here without remark;* but the effect of these and their like upon society in the United States has been deplorably

* It has received incisive comment from the competent pens of Mr. George William Curtis, in his "Potiphar Papers," and Mr. Henry Cabot Lodge, in his recent paper, "Colonialism in America."

debasing and vulgarizing. The observation of "high life" by such spectators, so transient, so ignorant, so incapable of thought, reveals to them nothing which may not be obtained by an expenditure of money; and, briefly (for I must be brief), this vast increase of wealth, this democratic equality, and these skippings over the surface of European society, working together, have produced as their resultant a social monster called in the newspapers "Society," or "World of Fashion." Now society and fashion (singular, inexplicable word thus used) are no new things here; but not this society, this fashion. Some money is necessary always for the formation and maintenance of a cultivated society; some exclusiveness must be practiced, or your society becomes a general bear-garden. But this society rests upon money only: not upon property, possessions, estates; but upon sheer money, that may be put in a box and carried about, got one day and lost another, like a watch or a toy, and with no more social disturbance; and this exclusiveness excludes only those who have little money, and as to the bears, shuts many of them not out, but in. Let any man who chooses so to spend time and trouble read the highly interesting paragraphs under the "World of Society" and "Circle of Fashion" headings, in three or four of our leading newspapers, and if he has any particular knowledge of society, and a knowledge which extends backward beyond the war, he will see that quite seven-tenths of them relate to people who, at that time, would themselves not have dreamed of themselves as persons of gentility (to use an obsolescent word), not to say of consideration or fashion; people without breeding, without education; whose every word and every tone (surest evidence on such a point) betrays the inferior associations in which they grew up; whose language, whether they speak or write, would be put to shame by that of a well-bred upper servant in England; and whose notions of politeness are confined to the observance of etiquette, which can be taught to a monkey and poured into a man, and yet more easily into a woman, as liquor can be poured out of one vessel into another; who have, indeed, generally a sort of formless, insipid good-nature, but of courtesy, inborn or inbred, no conception whatever.*

* The working classes can secure a great addition to their present enjoyments by cultivating among themselves a more refined society and gentler manners. There has been already a noticeable improvement in this respect among our native workingmen especially; and the manners of many of them

They have simply money,—money which they are ready to spend for their own coarse pleasures; money which they are even willing to give away—for their own aggrandizement; money which they are anxious to use in every mode which will enable them to “get on” and make a figure. Besides these, who are hundreds and thousands, there are others not so prominently rich, who are tens and hundreds of thousands, that are of like origin and social history, and who all more or less affect elegance and “aristocracy,” and talk of society and fashion. Most, but not absolutely all, of these, like most, but not absolutely all, of the others, are wholly, utterly lacking in any claim to distinction from the crowds that swarm to Barnum’s Greatest Show on Earth, except money,—money gotten quickly, and in too many cases not honorably, although not illegally. But because of their money and their gross and selfish expenditure of it, they, or rather (it is but right and fair to say), very many of them, seem to think that they have a position in this country corresponding to that of the leaders of society in Europe; for example, the nobility and gentry of England. They keep their fathers and their mothers hidden away,—in closets upstairs, or in the waste places and remote corners of the land,—and set up for people of fashion upon fine clothes, bric-à-brac, and champagne.

Ignorance is in a great measure the cause of this pretension. The pretenders are so absolutely void of elemental knowledge of the constitution and the history of society as to assume that, because the higher classes of other countries have money and live expensively, therefore money and expensive living make higher classes—an aristocracy. The same ignorance and the same inversion of the order of reason leads them to assume that, because the movements and the entertainments of eminent people in really aristocratic societies are chronicled in the newspapers, if they can have their doings recorded in the newspapers for the mere gratification of an idle public curiosity, they become in like manner eminent. Within the last ten years—

will now compare favorably with those of the business classes; though it must be added that the manners of the business classes themselves admit of no little improvement. But among a certain portion of the working class, very abundant in the city of New York, manners seem to be an unknown art, while society, in any proper sense of the term, would appear to be an impossibility.—“The Century,” July, 1883.

it is hardly so long—the outbreak of this folly has been at once a saddening and a ridiculous symptom of our diseased social condition. The doings and the family arrangements, marriages and the like, of grandees in aristocratic countries are published, because all that relates to such people, from the monarch down, is of more or less public importance. Those people are the governing classes of those countries, and they represent, either by inheritance or some sort of succession, the people who have stood in like positions for many generations. They hold the greater part of the land; they are the chief owners of the countries in which they live. If a prince or a duke is ill, or if his son is about to marry, it is a matter of some—more or less—real public interest. But if a man who has made ten millions of dollars in honest trade, or by doubtful speculation, and who has done nothing else, is ill, or has a daughter married, or gives an entertainment, of what public importance is it, or of what conceivable interest, outside of his private circle of acquaintance, except to snobs, quidnuncs, gossips, and curiosity-mongers? That such doings of such people should be dignified by publication as part of the news of the day is a pitiable exhibition of pinchbeck flunkeyism, worthy only of human apes and parrots.

When Americans who have become rich by trade or speculation assume the position, and affect, to the best of their blundering ability, the customs of an aristocratic class, it must be with utter lack both of memory and of common sense. Memories, very short ones, would tell them what they themselves were only a few years ago; common sense would teach them that, what they were, some unlooked-for turn of fortune's wheel might easily make them again, making at the same time others just what they are now. While I am writing, a paragraph comes before me recording the fall, the lamentable fall, of a man who, but a few years ago, was one of the millionaires of a great western community, and as such duly "honored." He was driven to take a place as salesman in a large trading house in another city, and there, by misconduct, which showed that he must have been always without principle, ruined himself in reputation as before he had been ruined in fortune. The transitory, shifting nature of our newly gotten wealth is one of its most striking and characteristic features. It is not like that of a true aristocracy stayed upon the land, or inwrought with the

structure of the Government. The saleswoman who serves a customer who, descending from her carriage, sweeps up in a costume that cost the poor girl's yearly salary five times over, and makes her demands and gives her orders in a tone which a countess would think vulgarly uncivil, and in language which should exclude her from competitive examination for a school teacher's place, probably looks with envy, and perhaps with admiration, at the "stylish" woman of "fashion." But constituted as American society is, she is, out of all question, by right her equal; and in ninety-nine cases of one hundred she is, according to all reasonable appreciation, truly and actually her equal in every respect, except the possession, the present possession, of money. The two, in ninety-nine cases of the hundred, are alike, the same woof and web, one of no better birth or breeding or education or connection than the other.* A "corner" in lard or the striking of "ile" by the husband of the one has made her just what a "corner" in lard or the striking of "ile" by a future husband may make the other. There is no other appreciable or possibly detectable difference between them; and the poorer is not unfrequently the better mannered and the better educated of the two. Moreover, the action of like causes to those which placed the one in a position to command the services of the other may in a very short time reverse their respective attitudes. It is not thus that even the wealth of a real aristocracy is made or unmade. Not long ago, a lady in New York was astonished to find that a little

* Not long ago, one afternoon, I entered a Broadway car and took my seat opposite a woman brilliant in beauty and elegant in person and in costume, who was, before me, the only passenger. Her appearance was so dainty, and her costume so combined richness with sober good taste, that I was a little at a loss why so very exquisite a dame should honor such an humble conveyance as a street-car with her presence. As we neared Madison Square, two middle-aged ladies entered of very different eye. Nothing possible more respectable, but little imaginable more unlovely. The dust of very rustic recesses clung to their flabby satchels, and their costumes showed a vain, though painful, study of "Harper's Bazar" and use of Demorest's patterns. After a moment or two, they began to regard their fair and splendid predecessor with great interest, and to interchange words and glances which soon attracted her attention. She looked at them a moment, and then stretching out her mousquetaire-gloved hand, exclaimed, in a whining snarl which, coming from such lips, was like hartshorn fuming from a rose: "The land! Deoo tell, ef 'taint yeoo!" Notwithstanding the fine feathers, the bird had been hatched in the same nest and sung the same note.

shop at which she dealt, and where she was served over the counter by the principals, was kept by the own cousins, bearing the name, of a moneyed grandee of great social eminence, whose wife could not rattle her tea-cups and saucers without an echo under "Circles of Fashion." It is not thus that a real aristocracy, even of *bourgeoisie*, is constituted.

Verily, bats and moles and owls might see that exclusive pretensions and attempts at class distinction in a society based upon wealth acquired by trade or speculation within the memory of living men are too essentially foolish to be worth a moment's respectful consideration. Such pretensions in the United States of to-day are so monstrous, so incongruous, so preposterously absurd, that, if they are continued, some modern Rabelais or Cervantes, looking down upon them from the throne of common sense, and compelled by temptation and material, will dip his pen in ridicule and shake the world with laughter.

Because, however, political or municipal equality is the absolute and unalterable law of the United States of America, now and forever, and because our new "merchant princes" are ridiculous, not as merchants, but as princes,* to conclude that we are without a social aristocracy, not unrecognized and not unprized, would show an ignorance worthy of the average European critic of our society. What it is has been hinted in the earlier pages of this article. The several circles which form it in the several centers of society are at once the most reserved and the least pretentious that we have;† but access to them is sought and

* This phrase "merchant prince" is used with a perversion of its right meaning, which is preposterous, in the true sense of that word. It is applied to almost every man who becomes very rich in trade; quite inappropriately and ignorantly. Its origin is the passage in *Isaiah* in which it is said of Tyre, that her "merchants are princes," meaning not that a Tyrian became a prince when he had made a great deal of money by buying and selling, but that in Tyre (the most powerful of the commercial communities of antiquity) even princes engaged in commerce. Clear enough this, merely from the complete passage, which is rarely or never heard: "Whose merchants are princes, whose traffickers are the honorable of the earth."

† Once on a time when, in a town not five hundred miles from Boston, a great entertainment was to be given which set "society" and "circles of fashion" agog, a man, whose forefathers were gentlemen and scholars before the United States existed, entered a costumer's shop, and was about to speak, when the female boss broke out: "I can't take another order, sir; not one; I'm so put about with this A. ball that I'm almost crazy." "Oh, never mind," was the reply: "I'm only a common man, and I don't know the A.'s; but I'd like a yard of gold lace if you'd be kind enough to sell it." About the

valued by those who are well enough informed in social matters to be aware of their existence. They are confined, of course, to our older commonwealths; for such well-rooted growths do not spring up, even in a republic, in one generation, nor yet in two; and these people were of well-known character and culture and social consideration when even the western part of New York was a savage-haunted wilderness. Some of them have been for a time longer than the age of the United States moderately wealthy, and all of them have been able to command that leisure without which education and social culture are impossible. But wealthy or not, they had such character and such breeding that they were highly considered by their neighbors, who recognized their social superiority, looked up to them as leaders, and sent them as their representatives to the colonial legislatures; and they were judges, ministers, and clergymen (of the Church of England). Of these people some are now rich, but others are poor (that is, among rich people); but the higher classes, and also the lower, of aristocratic societies detect their quality at once, and are often puzzled by the incongruity of manners and position. "Strange!" said one of these; "you have senators and governors, or men who are both, living like dukes and with as much influence, and who yet are pompous, low-bred, and uneducated; and men of the best birth and breeding among you are auctioneers, or journalists, or physicians, or even stock-brokers." As I am writing, a paragraph comes before me recording the death of a representative of this class in a small town in Connecticut. It may be fitly reproduced here:

"Mrs. Nancy (Coit) Learned, widow of the late Edward Learned, who died on Wednesday at her family house in New London, Conn., was one of the oldest and most honored inhabitants of that city. She outlived her hus-

same time a lady, in whose family on both sides were colonial governors and holders of manors, but who is notably quiet in dress and reserved in manner, was in a hotel "elevator" in the Fifth Avenue, where the bearing of a very richly dressed female passenger was so assuming and aggressive that finally, as she brushed out with a great flourish of rudeness, the other asked in wonder, "Pray, who is that lady?" "Mrs. Z.," was the reply. Now, the whole kin of the Z.'s, in the only previous generation in which the existence of Z.'s was known, had been cartmen and marketmen, in which capacity this gorgeous and explosive female's father had not improbably served the father of her before whom she had blown herself up so largely; but now they live, the reporters say, in a "palatial mansion," with the Z. arms carved upon their mantel-piece! and they flout people (when they don't suspect who they are) who seem to have little money and who have gentle manners.

band many years, and was last, though not least, in her generation of a wide connection long known for distinguished service to society. Born of a line of true gentlefolk, and united in marriage with a similar line near akin to her in blood, her own most rich gifts of bodily and mental brightness, of womanly sense and virtue, made her a fine example of the earlier New England school of principle and manners. She died amid her descendants to the third generation, in the same house where her married life and her widowhood were passed." *

It is not necessary to have known this lady personally (and I had not that honor) to be fully aware of the place which she and her kindred rightfully held in society; and held not by force of money; for although of that (perhaps the occasion may excuse my presumption) there was surely enough for comfort, and even for elegance, and also for benevolence (rarely appealed to in New England), it may be safely assumed that many a curb-stone broker, whose father would not have entered their house except by the back door, has in six months made more than their entire possessions in past days, by going short or going long, or some other sort of uneven going. This class realized, as nearly as possible, the ideal of a social aristocracy; for their rule, co-existing with municipal equality, was the social superiority and government of the best. Now, when the best are cast down from their social thrones, their places must be taken by those who are little better than gilded rudesbys and successful sharpers. And, indeed, these social *aristoi* seem to be dwindling in power and importance; beaten down and made comparatively little by the brute power of money in a heterogeneous, half-foreign community, which knows them not, as the Pharaoh arose that knew not Joseph. If the two mingle, the best will surely be debased. That law is absolute. And thus, in any case, it would seem that we are to show that in a perfectly democratic society, where the municipal rights of all are equal and identical, no aristocracy is possible, even in a social sense; but that its seemly and gracious presence must be replaced by a bloated plutocracy, that basest and coarsest and most degrading of social forces.

RICHARD GRANT WHITE.

* New York "Evening Post," June 7, 1883: manifestly, I think, an adaptation from a Connecticut newspaper.

SHOOTING AT SIGHT.

IN every age of the Christian era, the religion of the Prince of Peace has been perverted by fanaticism or superstition into a conflict of arms between nations and forcible settlement of personal disputes between men. Crusades in the name of him who died on the cross to save the soul, which is the life of man, have been preached and prosecuted to the destruction of both body and soul. Catholicism and Protestantism have engaged in the strife, with alternate victory, and rivaled each other with the sword and fire of persecuting zeal.

To settle the title to a portion of that earth out of which the progenitor of the race was made, wager of battle was the only legal mode of trial in England from the advent of William the Conqueror to the reign of Henry II., if not during all the antecedent Saxon rule; and it had been in vogue in Germany from the beginning of the sixth century. It is as amusing as it is astounding to survey that trial, so solemn and yet so farcical it seems to us now. A piece of ground inclosed by lists was laid out as the scene of the combat; the justices of the Court of Common Pleas, full-robed and ermined, surrounded by the learned sergeants-at-law, sat in state, on an elevated bench, to survey the conflict; issue of right was solemnly joined between the contestants by an appeal on oath to God, each abjuring all enchantment and sorcery whereby the devil might be exalted and the Almighty debased.

During the same period, if one were suspected and accused of a certain class of felony, including the homicide of a relative of the accuser, an appeal lay to the same arbitrament of arms; and the *vadiatio duelli*, or wager of battle, duel, or single combat, was a personal legal right of every subject of the realm. The ground was staked off and inclosed with like particularity; judges sat in the same solemn array to preside over the appeal

to arms ; the combatants, who must fight *in propria persona*, and not by proxy, were sworn with hands clasped, the accuser that the accused was guilty of the murder or other felony, and the accused that he was not ; and thus the issue was joined by body against body, life against life, and the presence of the God of Peace was invoked to decide the judgment and sentence to be written in the one's favor in the heart's blood of the other.

So in the courts-martial, converted into courts of chivalry, points of martial etiquette or military dispute were settled by single combat, under the supervision of the Lord High Constable of England—certainly with much more propriety, it would seem, in cases of military differences than in civil actions for felony or to try title to land. The ordeal was abolished in France in the fourteenth century, not through the operation of reason and a comprehension of its absurdity, but because in a noted case its fallibility was demonstrated. In 1386, one Legris was accused of violence toward a lady. He maintained his innocence, underwent the ordeal, was vanquished, and thereupon was adjudged guilty and executed. After his death, another man confessed that he had committed the crime for which poor Legris was hanged. This occurrence created an impression which no argument on the preposterousness of the appeal could ever have produced and led to its abolition.

Yet the only mode of trying title—not the mere possession or right of possession to land, but the real right of property therein—in our mother country, until the reign of the second Henry in the latter part of the twelfth century, was by wager of battle or single combat. At that time the parliament, under the advice of Chief-Justice Glanvill, gave the parties the option of trying title to realty by the grand assize or jury trial ; but the old right of trial by battle remained a legal mode until the latter part of the reign of George III., in 1818, when that remedy was abolished, together with those of appeals in felonies and in the courts of chivalry. Thus, till the present century, a legal method of settling rights of property in land was personal combat, usually fought by representatives of the litigants, until one or the other was slain or pronounced the word “craven,” in which latter event he was thenceforth branded with infamy more intolerable than death.

Men will still fight for land and for revenge. As communities and individuals, they have always so fought. The American

continent is dominated to-day by races which conquered it. The red man occupies but a fraction of the immense hunting-grounds of his ancestors, and our greed for land will not long leave him even that. To re-adjust the boundaries between states and mark the lines of rival dominion, Europe has fought for centuries, and will probably continue to fight until the millennium. The martial roll of England's drum and the defiant scream of her fife, the roar of artillery and the rattle of musketry, the ships of war in which her "march is o'er the mountain wave" and her mariners make their "home upon the deep,"—these have established her title to that broad belt of empire which encircles the globe. The whole zone of her territory is as red as the uniform of her soldiers. Deep in its inmost recesses the heart of France feels the mortification of recent defeat and is aching for vengeance upon Germany. Stronger than love of republican or monarchical or imperial government is that agonizing heart-beat; and it needs but another Corsican's genius, ambition, and energy to give vent to its fury in a mingled wail and war-cry for revenge.

In the court-room to-day men will employ counsel more readily, and pour out fees more freely, for land and for revenge than for aught else of human property or passion. To settle the line between adjacent proprietors, though the dispute may involve the merest trifle of territory, the fight begins in the lowest and ends only in the highest court having jurisdiction. The same spirit that once wielded the sword and buckler now puts metal in the brain and sharpens the tongue of the advocate to settle the same rights and redress the same wrongs. It is but a change of forum and weapons; the passion that impels the contest, whether for greed or for revenge, is the same. He who wins passes still through the ordeal of nerve and perseverance.

Trial by battle, once so prevalent in Europe, was but another form of trial by ordeal, or appeal to the *judicium Dei*, which was in vogue among the Saxons, and continued after the conquest until the reign of Henry III. If the accused could take in the naked hand a bar of red-hot iron, or walk barefoot over red-hot plowshares, or thrust the bare arm into boiling water, and escape unhurt, his innocence was pronounced clear, because only God could work the miracle of his escape; and so it was argued, however illogically, that if two men try the other ordeal, of a contest with deadly weapons, the same Providence would shield

the innocent and overthrow the guilty. The assumption in all cases was that God would intervene for the right.

From the ordeal by battle or single combat, to try land titles, or felonies, or military disputes, by an easy leap sprang the ordeal by the "code" to settle affairs of honor. If the law of the land authorized the settlement of a disputed title, or a theft of goods, or a point of military etiquette, by duel, why should not an insult, a slander, a libel, a defamation of character, an offense to honor, a larceny of reputation, be settled in the same way?

By this course of reasoning, on the continent of Europe and in the island home of our ancestry, writers, generals, and statesmen gave to the duel the approval of their judgment and the sanction of their example. In the mother country, among the number who countenanced dueling, who challenged or fought on points of honor, may be found such great names as the Dukes of Marlborough and Wellington, of York and Richmond, Fox, Pitt, Castlereagh, Canning, Sheridan, Grattan, Curran, O'Connell, Peel, Disraeli, and Jeffrey.

In France, though she early abolished the ordeal by battle as a judicial proceeding, dueling has been carried to greater extremes than in any other country. During the reign of Louis XIII. two gentlemen held each other by the left hand and with the right stabbed with daggers. Two others shut themselves into a room and cut each other's throat. Richelieu tried hard to suppress the practice, and the Count de Bouteville was beheaded for it in 1627. Even women have fought duels in France; and, in Denmark, women were not permitted to have champions, but did their own dueling, though with certain allowances and advantages. Napoleon, who never shrank from slaughtering men by platoons, had a profound contempt for single combat, and did all he could to suppress the practice. Gustavus Adolphus, when two of his officers wanted to fight a duel, blandly gave them leave, but informed them that he would prepare a gallows for the survivor. Cromwell was equally opposed to it. For the first duel ever fought on this continent, which took place at Plymouth in 1621, the combatants were punished by being tied together neck and heels for several hours. When General Greene refused a challenge, Washington commended him.

But the foolish practice was not to be killed by the edict of any emperor, cardinal, or selectmen; it yields only to the slow process of time and the growth of public opinion. Ancestral

blood still flows in the veins of descendants ; and in our country, almost to the present period, men of great renown sustained the duel by precept and example.

But great men have at last ceased to fight duels. Such men as General Charles Lee and Colonel Laurens, Generals Cadwallader and Conway, General McIntosh, and Button Gwinnett, of revolutionary fame, have retired from the lists. No Alexander Hamilton or De Witt Clinton or William H. Crawford now sacrifices or risks a life that belongs to the country on the altar of a strange god—strange to the very breath of true Christianity and to the civilization which that breath is everywhere warming into peaceful and beautiful life. No illustrious naval officer like Decatur is likely again to fall before the fire of a dueling pistol in the hands of a brother officer or a stranger to the service. No man like President Jackson will again live to regret, when crowned with all the honors of a great country, that he had once encouraged a practice which duty to that country and justice to its service required him to repudiate and forbid. Never more shall patriotic statesmen and orators like Clay, Randolph, and Benton make the walls of the capitol ring with eloquence, and yet risk the brain that conceived and the tongue that uttered such power on the chance of a shot. It should be remembered, in behalf of our dueling fathers, that the absence of those stringent laws which now, in most of the States of the American Union, make dueling felonious and disqualify for office all directly or indirectly engaged therein, gave them tacit license to follow that example of many illustrious men of Europe, which itself, as we have seen, followed the example set by law of adjudicating in a similar mode the title to land, the guilt of committing certain classes of crime, and the violation of the etiquette and discipline essential to the efficiency of military service. Had public sentiment, molded into law, been then as now, it is reasonable to suppose that they would not have deliberately violated the laws of that country which they loved so much and served so faithfully.

It may, too, be justly said that the field was open and the fight in a certain sense was fair. No mean advantage was taken of an antagonist, no concealed pistol was suddenly drawn and leveled with fatal effect at an unarmed man. Of such conduct, Mr. Benton well said: "Certainly, dueling is bad, and has been put down, but not quite so bad as its substitute—

revolvers, bowie-knives, blackguarding, and street assassinations, under the pretext of self-defense." Let us rejoice with him that dueling has been put down; but let us see to it that what he termed its substitute be buried in a deeper grave. The grog-shop and the concealed pistol are the roots of all this evil.

It is generally believed, not only that the settlement of personal difficulties with deadly weapons is more prevalent in the Southern than in the Northern States, but that public sentiment approves the practice on Southern soil. It may be conceded that the settlement of difficulties by the duel has been more common amongst us than with our Northern brethren, and that at the close of the late civil war affrays, riot, and bloodshed were of very frequent occurrence; but if all the facts are candidly examined, fair-minded men will be led to the conclusion that it is highly creditable to the old Southern civilization, and much to be commended in those who live amongst the graves of their fathers, that the disparity is not infinitely greater than it is.

In respect to the reasons which made the duel more resorted to in the South than in the North, it may be observed that the temper and tone of the two sections of our great country were infused into each by the blood which the fathers who settled them respectively brought across the water. New England derived hers in largest measure from Puritan settlers. Sturdy, courageous, energetic they were, as those who followed Cromwell to victory and the Protectorate; yet through all their character flowed veins of deep piety, which at times ran wild into superstitious fanaticism. But that force moved them as a community rather than as individuals. New England organizes before she moves. When she moves, the individual is swallowed up in the mass. Corporate power, aggregate combinations,—these have been the pillars of her strength, as they have been the habit of New England's life, and much of that life she imparted to the broad territories above the Ohio to the Pacific coast.

On the other hand, the dominant population of the South had more cavalier than Puritan blood in its veins. There was in its character more individuality and less capacity for combination; more dash and less deliberation in its action. It, too, had its faith in God and its reliance on him for the right, but its zeal was not always according to knowledge. Its individuality made it ready to fight on the instant; reliance on self grew out of

that individuality; it was not disposed to wait for company or for law; a word and a blow were instantaneous; and if the blow fell from muscle too strong, the heart was unconquered and panted for equal arms. Its faith, however erroneous, gave it reliance on protection and assistance from God in what it deemed a righteous cause. Hence the more frequent single combat, the prepared ground, the equal arms—the duel.

Reliance upon God for intervention on the dueling-ground was as much the fruit of faith, uncontrolled by reason, in the South, as the passage of blue laws and burning of witches was in New England. With the Southern fathers this faith often went to the extent of deeming it dishonorable and presumptuous to practice or prepare for the wager of battle. Knowing that an ancestor, whose honored name he bears, had figured largely in the politics of Georgia and of the Union, from the close of the Revolutionary War to the year 1806, when he died in the Senate of the United States, and had fought duels more than once during that period, the writer has recently read again the biography of that ancestor, and now transcribes the following paragraph:

“In March, 1780, he was unhappily the antagonist of Lieutenant-Governor Wells, in a duel which terminated fatally to the latter gentleman. He was himself shot through both knees. Confined by his wounds for months, refusing amputation, and abandoned by his surgeons, he was prevented from taking part in the military operations of the spring of 1780. Justice to him requires the declaration that, although he was forced into this difficulty by a gross personal indignity, which his honor as an officer and the spirit of the period compelled him to resent, and although he had done nothing where-with to reproach himself, yet he afterward deeply lamented the dreadful catastrophe. He was no duelist from principle; he abhorred the practice. It was his lot on several occasions in subsequent life to be similarly involved; but he went always to the place of combat without preparation, with no vindictive passion, confiding in the rectitude of his cause, and convinced that duty to his country demanded the exposure of his person.”

In like manner, many a duelist abhorred what he felt constrained to do, and deeply lamented a result fatal to his adversary. Another instance is within the knowledge of the writer: A felon, under the guise of friendship, obtained access to the fireside of a Georgian, and, during the absence of his host from home, dishonored his bed. A challenge and duel resulted in the death of the seducer; but he who was thus wronged, and thus avenged himself, went to his grave a miserable man. Often, instead of sleep at night, he walked his chamber in the anguish

of a conscience that would allow him no rest during the whole night.

In respect to the reasons which, at the close of the war, rendered the South more frequently a field for riotous conduct and bloody rencontre than the North, let the plain facts be submitted to a candid public judgment. Southern soil was the four years' battle-field of that war. It was practically a foreign war to the North. Rarely was a hostile foot on Northern ground. With the exception of Gettysburg, no battle-field bears a Northern name. President Lincoln, whose heart was big enough to forgive and forget, and whose hand would have restrained vengeance, was slain by an assassin, who cried, "The South is avenged!" Alas! poor South! how often has the folly or fanaticism of some erring child soiled the garment and stained the honor of the innocent and spotless mother!

After the war, there was a reign of bedlam in the South, and it seems almost miraculous that it did not become a reign of universal bloodshed. Of course, every man who could procure a pistol carried it, and, lest it should be taken from him by force, he carried it concealed. Despite the penalty of law, and its enforcement in the courts, too much of this habit lingers yet. With no such palliating circumstances, the same habit exists largely at the North. In fact, the whole country is badly afflicted with the awful plague.

It is unjust to judge an entire community by one man, or a great section by one little community therein, or by a portion of its inhabitants. The mass of the Southern population are as honest and earnest for a peaceful Christian civilization as the mass of the North. The echo of the public sentiment of a free people reverberates from the laws they make and the men they put into office to expound and enforce them.

The State of Georgia, at least, may invite comparison of her laws on the subject of dueling and carrying concealed weapons with those of any other. Any person who participates as principal or second in a duel in this State is disqualified for holding office; if death ensue, it is murder chargeable on all who participate; if any one sends or accepts a challenge, it is a misdemeanor punished by fine, imprisonment, or hard labor in the penitentiary; if any one consents to be a second while in this State, no matter where the duel is to be fought, the crime and penalty are the same; if a duel be fought and it does not

result fatally, the principals and seconds are all guilty of a high misdemeanor, and are punishable by imprisonment and hard labor in the penitentiary; if any one publishes another as a coward, or uses other opprobrious epithet toward him, for declining to fight a duel, he shall be held guilty of a misdemeanor, and punished by fine or imprisonment or the chain-gang, or all of these combined; if the printer of such publication fails to give the name of the author, he stands in his shoes and is punished in the same way; and if any peace officer neglects to put a stop to any contemplated duel of which he knows or has notice, he is dismissed from office.

So the act of carrying, openly or concealed, any deadly weapon to church, religious meeting, court-ground, election precinct, or any other public gathering, is a misdemeanor, and punishable with fine and imprisonment; and carrying such weapon concealed anywhere, in-doors or out-of-doors, on street, highway, or private path, is a misdemeanor and is punishable in the same manner. Grand juries are sworn to present all such offenders, and the Circuit judges are required to give these laws in special charge to grand juries at every term of the court. The judiciary of Georgia strive to enforce these laws, and day by day the evil lessens and crime diminishes.

The writer ventures to subjoin the concluding paragraph of the opinion of the Supreme Court of Georgia delivered by himself in the case of the State *vs.* Hill, reported in Sixty-fourth Georgia Reports, page 453. In 1879, Hill had premeditatedly killed a man who was guilty of adultery with his wife. A jury had pronounced him guilty of murder, and recommended that he be imprisoned for life, and he had appealed for a new trial.

"We add but a single remark: If men will take the law into their own hands, become themselves the judges of their own cases, and their own sheriff to execute the sentence they themselves pronounce, they must be certain that they adjudge the case according to law, and execute the sentence which that law pronounces, or they must suffer the consequences of their mistake of the law. Homicide for revenge of past offenses, however heinous, deliberately planned and premeditated, and carried into execution after reason has had time to assert her supremacy over passion, is murder; and he who judges that in his own case it is not, and executes sentence in such a case on a fellow-being, must suffer the penalty which the law imposes upon the murderer."

The people of the North, and of the world, may rest assured that life and limb and property are held as sacred at the

South as elsewhere, and her arms are spread wide to welcome capital and labor. She is conscious that she needs brain, muscle, and money to develop her rich resources and open her abundant mines of wealth. The day is past when her public men who declined a challenge lost their power and popularity. Prior to the war, Alexander H. Stephens challenged, at different times, Herschel V. Johnson and Benjamin H. Hill. Each declined the combat; yet neither ever lost a vote by it, but both descended peacefully to their graves, garlanded with flowers fragrant with Georgia's love and wet with her tears.

The day of the grog-shop and of that which it produces—the inflamed passion and the deadly weapon—is rapidly passing away. The local-option retail law generally pervades the State of Georgia; county after county prohibits the traffic, reduces expenses, and diminishes crime. The prosecuting officers of the State are paid according to the number of criminals tried; and they inform the writer that in those counties where this traffic is prohibited the office of Solicitor-General is worthless. Soon, let us hope, the generous Southern sun will shine upon an entire population, sober, prosperous, peaceful, and happy. May that population be swollen into a vast multitude by a tide of emigration which shall enrich every valley and cover every hill-top with good, sober, industrious men.

JAMES JACKSON.

FACTS ABOUT THE CAUCUS AND THE PRIMARY.

WHEN Messrs. William Orton and Jackson S. Schultz reported, in 1871, their plan for the reorganization of the Republican party of the city of New York, the former admitted that it would not hold for more than ten years. "For," said he, "everything degenerates in New York, and nothing degenerates so fast as a political organization." Time has proved the truth of his words. The system which worked fairly well at first has, as a settled institution, become rotten to the core. By 1876 Mr. Schultz declared that he would no longer waste his time in attending the primaries, for the "workers" always "fixed things" before he got there, and if he tried to "fix things" they would promptly adjourn so as to beat him at the game. Three years later, Mr. George Bliss, than whom no better authority on the subject can be named, and who for years warmly supported the organization, suddenly awoke to the fact that the degeneracy predicted by Mr. Orton had set in and was making rapid progress. From year to year the abuses have grown worse. Controlling the vast federal patronage in the city, and having their representatives on the Board of Aldermen and in the State Legislature, these little evening clubs, to which admittance is denied unless the candidate will bind himself hand and foot by a disgraceful and humiliating pledge, and from which the slightest sign of independence will cause expulsion by a majority vote, have for thirteen years held absolute direction of the party policy, allowing the other fifty or sixty thousand Republicans, to whom they refused any share in the party management, the barren right of registering their decrees. To go through the empty form of depositing at the polls a ticket in the preparation of which they have not been allowed the most insignificant part, is all that is left of the "divine right of suffrage" to the great mass of Republicans.

in the city of New York. In spite of an adverse majority of nearly two hundred thousand in the State, in spite of the well-nigh universal demand of the respectable newspapers and voters of the party, backed by the emphatic declaration of the last party platform, in spite of assured defeat to the party in elections to come, the old policy of exclusion, "discipline," and expulsion is still in force, the old iron-clad pledges are still exacted, the old "leaders" still retained; while the chairmanship of the Central Committee is refused to David Dows and Theo. W. Dwight, to be conferred upon Mr. John J. O'Brien, whose chief qualification seems to have been the fact that his obstinate candidacy for the office of Sheriff, in the face of protests from his own colleagues, divided the party vote and gave to the Democrats the municipal election of 1882.

But, it may be said, while no candid man denies that the primary system of the city of New York is full of the grossest abuses, yet, elsewhere in the State, the voice of the caucus may still be relied upon for a fair expression of party opinion. Let us go to the facts again.

In the fall of 1881 was held the primary election for the second ward of Newburgh, N. Y., under the management of the ward committee, whose chairman, in the face, it is claimed, of a majority of "noes," appointed as chairman and secretary of the caucus two of the candidates on the "ward committee ticket." These two were put into a little low-roofed, ten by fifteen shanty, the door was locked, an unopened ballot-box was handed in through a little window, and after refusing the opposition, or "People's Ticket," a representative, the chairman of the caucus announced that he was ready to receive the votes, which were passed in through the window, and the balloting began. The night was dark and the street filled by a crowd collected from all parts of the city. When the polls were closed, the supporters of the People's ticket again demanded an inspector at the counting, and were again refused. The chairman, with his back to the window, ten feet away, began with his colleague to count the votes, and announced that of the three hundred and seventy-five cast, his own ticket had received two hundred and six against one hundred and sixty-nine. A protest against the farce was filed, and on appeal to the convention the affidavits of two hundred and one persons were exhibited,—thirty-two more than declared by the chairman, and thirteen more than a majority,—

who swore to having voted the People's Ticket, a copy of which was attached to the declaration of each affiant. The chairman of the caucus, on the other hand, simply swore that the result as given was correct, but admitted on cross-examination that he did not count all the tickets, presuming his colleague's statement to be correct! He further admitted that he had destroyed the poll lists and tickets, "as usual," a few minutes after the result was announced. Yet, in the teeth of this evidence, the committee on contested seats, upon the selection of which the holders of the disputed places were, with gross unfairness, allowed to vote, decided against the contestants.

From other parts of the Empire State the same story comes in. "Our Republican ring," writes a gentleman from Buffalo, "tries to keep away respectable voters from the caucuses by appointing inconvenient times and places, giving short notice, and sometimes getting up rows, or so 'fixing' the organization beforehand . . . that respectable people will not go to them. By 'fixing' the new ward committees at the caucuses they can repeat this operation next year . . . so that even in the ninth, tenth, and eleventh wards, where respectability is actually in the majority, the respectable vote cannot now be got out for a caucus. When they cannot get a majority vote by these means, they bring in repeaters from other wards, and have resorted to frauds in counting the votes."

The full history of the "snap" primaries of 1880 in Albany County, that shameful attempt to throttle the majority, which our present system of primary elections makes only too easy for a determined and unscrupulous minority, should be known to every Republican who wishes to guard against a repetition of the abuse, and who still clings to a lingering hope that the wished-for reform may be brought about within the party before another "tidal wave" carries the independent vote, which he now sees can decide any election in the State of New York, over to his opponents for good and all.

Before the election for district delegates, preceding the national campaign of 1880, a petition, representing over fifteen hundred Republicans of Albany County, was presented to the general committee, requesting the appointment of certain gentlemen to secure a fair count at the polls. The response to this appeal was prompt and decisive. Refusing even to hear the communication read through, a minority of the committee, who,

however, took pains to attend and make a majority of the meeting, laid it on the table, and at once ordered a call for the holding of the primaries on the following day (Friday), to elect delegates for conventions to be held on the ensuing Saturday and Monday. The "slated" delegates, ten in number, were straightway elected in accordance with the preconcerted scheme, and subsequent disclosures showed that a deliberate conspiracy extended throughout the entire county. In Bethlehem, the notice was posted in the evening for an election to be held on the following day. As it takes time to get the farmers together, a week's notice had been customary. In New Scotland, the call was posted on Thursday for a meeting on Saturday to elect delegates to Monday's convention. Afterward, as it appeared, the two days' time seemed a dangerous concession, and so the machine leaders sent about one O'Brien to pull down the notices and post others for an election on Friday instead; and the same trick was played at Berne, Coeymans, and Guilderland. In Rensselaerville, the notice was published on Thursday for Friday's election. In Knox, five henchmen awaited the coming of the mail, on receipt of which, with instructions, they immediately posted notices, under which they at once resolved themselves into a caucus, electing three out of the five delegates to Albany! At Westerloo, no meeting was held nor any notices given; yet at the convention two delegates claiming to represent that place were promptly on hand. At Albany itself, in every ward, one or both of the inspectors of election appointed by the general committee, and over whom any other supervision was peremptorily refused, were office-holders directly controlled by the machine boss.

Such are a few examples of the operation of the present system of primary elections in the State of New York. If it were necessary to multiply instances, the writer could give similar facts, reported and vouched for, from other cities and towns. Those which are here detailed have been taken from the history of the Republican party, for the reason that within that organization the system has reached its highest development. But the words "Republican" and "Democrat" have no more significance for the "practical" politicians who trade and dicker in offices and votes than they had in the days of Mr. Tweed, who found that the easiest and cheapest way, by far, was to buy up the Republican caucus, "run" the Republican primaries, and then allow the

innocent voters to go through the form of a spirited contest at the polls.*

But let us see how the system works under a different party name. In Democratic caucuses in the city of Baltimore, Md., it is stated, on the authority of a former United States Senator, the abuses have become intolerable. Frequently, with but a score of men to vote, thirty or forty ballots have been found in the hat. "The roughs of both parties," writes a Maryland legislator, "unite to carry for each other primaries in their class interests, to drive away the respectable element, and when not numerically strong enough, to stuff the ballot-box with 'pudding tickets,'—one ticket sometimes inclosing some twenty slips,—which the rascally election judges deliberately open and count for their nominee. . . . Each party in Baltimore is instructed by their city convention to receive votes from a certified court copy of the last revision of registration. Sometimes they obey; but, as we have over thirty thousand grave-yard and imaginary names on the registration lists, these are used by primary election manipulators for hired repeaters. This being the case, gentlemen will no longer attend primaries or support the class of men they force on each party."

In the primary elections of 1879, a city councilman and member of the "Three-Tenths Social Club," together with a city magistrate, brought wagon loads of hired repeaters from the Eighteenth Ward, "voted" them for the ring candidate in the Twentieth Ward, and then drove them over to the Eleventh Ward, where they again voted their roughs for another ring candidate. The reward to one of the principals for this sort of work, it is claimed, was a \$1600 clerkship in the City Appeal Court. In May, 1881, the power of the Democratic machine in Baltimore was so strong that it controlled the appointment of all the judges and clerks of the primaries in each of the twenty wards for the ensuing year. In the Twentieth Ward, the only one where a stand was made against the ring, the machine candidate was "given" two of the three judges—a saloon-keeper, and the boss of a gang of street-cleaners. The "leaders" collected some three hundred or four hundred repeaters in a saloon in an adjoining ward, where "refreshments" and a registration

* Tweed disclosed his shrewd methods with much cynical frankness shortly before his death. See testimony taken before a committee of New York Aldermen in 1877.

book of the Twentieth Ward were provided, the men were "fixed" (*i.e.*, furnished with names to vote under), and sent in lots to the Twentieth Ward to vote for the ring's choice. These facts were brought out on sworn testimony at the convention on the following day. "Two years ago," writes a gentleman from whose letter these statements are taken, "I found eight hundred names to strike off our registration lists, and this autumn, one thousand six hundred and seventeen; and this is a clean ward. I could fill pages with instances like those already given."

In Philadelphia, under a similar system, like abuses sprang up and flourished. The rules of both parties were practically the same, and operated as they were meant to,—only to afford facilities to the "workers" to accomplish their purposes under a show of fair dealing. To control the inspectors meant to secure the primary election, without regard to the lawful ballots cast; to control the temporary chairman meant to secure the nomination, without regard to the number of delegates actually elected. The experience of a private gentleman, who supposed that he was performing a public duty by undertaking to join in the preliminaries of a political canvass, bears out this statement: "At a convention here to nominate a District Attorney in 1877, I sat as a delegate, or rather should have sat, for the purpose of nominating for that office the present Attorney-General of the United States, my friend Mr. Brewster. There were twenty election divisions in my ward, each of which elected a delegate to a ward convention, which was charged with the duty of electing three delegates to the county convention. The ward convention was held in strict conformity to the party rules, and three of us were elected delegates without opposition, receiving thirteen out of twenty votes, the other seven not voting at all. It turned out that these seven subsequently met and held what they called a convention, and proceeded to elect three other persons as delegates. When the convention met, we discovered that a printed list had been made up of the delegates to be recognized as *prima facie* entitled to sit in the convention, and our names were not on the list. Of course, we had no notice, were not even placed in the position of contestants, and were simply turned out. This was done in a sufficient number of wards to give one candidate, who controlled the temporary chairman, a large majority. It happened that I had greater facilities at my command than others, and I succeeded in having the necessary papers prepared

to make a contest in accordance with the rules, when the 'hat trick'* was played upon me and I was again put out. This was the uniform practice here for years. The man who succeeded in getting the temporary chairman always got the nomination, without regard to the number of delegates actually elected for him." No one, though beaten by the most outrageous cheating, could make a successful stand against this iron-clad machine: for a solemn pledge in writing was exacted from every candidate before the balloting began to abide by the result of the vote in any event.

From other cities come similar facts. In Chicago, the local politicians long ago employed the methods familiar to the henchmen of Brooklyn and New York. In the spring of 1881, the notices of a primary in the Eighteenth Ward were sent out either the evening before or the very morning of the election, so as to follow the letter of the regulations, whilst giving to the "insiders" alone an opportunity of arranging to be on hand. The trick is a common one there. In Omaha, Neb., the Republican primaries, at which Democrats are frequently brought in, are under the management of a central committee, and the faction which musters the largest crowd at the opening of the polls controls the election of judges and clerks, and through them the result of the vote. At Indianapolis, Ind., the machine arranges everything in advance. At the Eighteenth Ward caucus of that city, in 1881, more tissue ballots were found in the box than there were voters in the whole ward. All were counted, and the tissue-ballot delegates declared elected. In the Twenty-fourth Ward, Democrats were brought in by both factions of a Republican caucus. Two delegations presented themselves at the convention, the chairman of one maintaining his side by the declaration: "Dey say ve had Temocrats, but it's a lie! Ve hadn't no more Temocrats dan dey did!"—a *tu quoque* argument which had its weight, for each side was allowed one-half its delegates—the customary method of composing such disputes in Indiana, according to the alleged statement of an old politician, who is said to have declared that he never knew a contest to be settled in any other way. In Cincinnati, Ohio, the primaries are controlled by the ward "leaders" much as they are in New

* The rules provided that the committee to whom cases of contested seats were referred should be drawn by lot. As the temporary chairman appointed the tellers, he had little difficulty in "fixing" the result.

York. "The game," writes a gentleman whose name is well known in that city, "is to make the caucuses and primaries so disorderly and nasty that well-behaved people are glad to remain away"—a practice which, I am assured, is by no means uncommon at Milwaukee, Wis.

In certain parts of New England, the spirit of the caucus of Samuel Adams still, in a measure, survives. "In local elections," writes a former Assistant Attorney-General, speaking for Concord, Lynn, Salem, and Springfield, "the voter in caucus is expected to support the candidate, unless such candidate is a corrupt man"—an encouraging limitation, if allowed. Yet the exception is itself limited: "If he is only weak, a voter loses caste who bolts; and, as the Attorney-General says, he is considered a black sheep, and when he seeks for favors he gets the penalty of his independence. . . . In Springfield, the popular will generally finds free expression. . . . Both parties use the public ward-room. The Mayor is nominated at city caucus, at which many respectable voters attend, and where charges of fraud are seldom, if ever, raised." But in the political circles of Boston no such laxity of discipline is tolerated. There the evolution of the system follows the usual lines of development. The ward elections are preceded by "back-parlor caucuses," where the "slate" is made up which generally wins; and the discipline of both machines is as strict as any New York leader could wish. Mr. Patrick Maguire, Chairman of the Democratic City Committee, assures me that a refusal to support the regular candidate causes the offender "to be cut off from the party and not allowed to afterward participate in caucuses," and to be expelled from his political association or club. The Republican City Committee is composed of five members from each ward, who constitute the ward committees. They elect their own members, subject to confirmation by the Executive Committee, which controls the time of holding the caucus and the preparation of the ballots, decides contested elections, and holds exclusive ownership of the rolls. Their power, as defined by the constitution and rules, is more centralized and arbitrary than that of any other political organization of which the writer has knowledge. Their chairman also declares that a refusal to support the "regulars" is punished by striking the bolter's name from the rolls, refusing his vote, and expelling him; while a member of the City Committee who even belongs to any other political committee or

convention is liable to expulsion. Such is the development of the New England caucus in the State where the Republican party, in convention assembled, unanimously adopted the following statement of the doctrine of party allegiance: "The duty of all Republicans loyally to support the candidates of the party, and the duty of the nominating conventions to present candidates who are acceptable to all Republicans, are reciprocal duties of equal force and obligation." This, too, was the party which refused to expel, at the urgent solicitation of the present Governor,—it was at one of the times when he happened to be a Republican,—a delegate who declined to pledge himself as the General demanded. And yet it was in this party and in this State that Judge Adin Thayer gained the twenty-five years' political experience which leads him to the conclusion that "no better system could probably be devised."*

People do not everywhere agree with Judge Thayer, for in certain States substitutes for the primary system have been adopted with, it must be admitted, but scanty success. Of these the best known is the "Crawford County Plan," by which the electors cast their votes directly for the candidates of their choice, instead of voting for delegates to select the nominees in convention. The system, as might be expected, works fairly well in small cities and towns where candidates and voters are known to each other, and where the opportunities for fraud may thus be kept in check. In Springfield, Worcester, and some other cities of New England, for example, the custom of voting directly in town meeting for the nominees to local offices works very well, because the inspectors have little difficulty in "spotting" repeaters, and the balloting takes place in fit places at convenient hours. So, too, in Richmond, Va., the Democrats, for over ten years past, have tried the plan of keeping the polls open all day and allowing the voter a direct vote on the nominees with undoubtedly good results. The party action, it is

**Note.*—Judge Thayer takes pains to qualify his declaration in this way: "If I attend, and, contrary to my advice, corrupt men are nominated for office, then I can refuse to ratify its doings with clean hands; but not otherwise." Can he? Where in the rules of either party can he find this limitation admitted, expressly or by inference? And does Judge Thayer suppose that the "workers" will, for one instant, allow him or any other private citizen to decide for himself whether a candidate is or is not "corrupt" so long as he is "regular"?

claimed, has been harmonious, effective, and pure, with an actual gain of popular interest.

The fact that respectability is thus allowed a voice here and there leads observers like Judge Thayer to conclude that the same system may be applied with equal success everywhere, provided only the respectable element will "come out" and do its duty. But the system in its present forms has never yet, in the long run, worked with any but disastrous results in even the respectable districts of thickly populated cities, where it has proved totally inadequate to protect the honest voter and to give his voice and vote the effectiveness which an honest system should secure. For example, a California correspondent of the New York "Nation" writes, in 1881: "The primary works here about as it does everywhere else, with reasonably fair results in the country, and in the cities in a way which is well-nigh the despair of good citizens."* In 1880, the Republican primaries were alleged to have been "fixed" for the election of United States Senator. "The vast and complicated intrigue," says Mr. Nye, "wire-pulling and log-rolling necessary to accomplish this result had been carried on under the very noses of the voters without exposing what was in progress." One cause of all this is patent. The California statute, like that of Ohio, makes it entirely optional with any political body whether or not it will conduct its proceedings under the general election law. The result is simply to hasten the abuses a single step. As the primaries in New York and Brooklyn "fix" in advance every measure which the ordinary voter is allowed to ratify at the polls, so the "back-parlor caucuses" and "conferences" of California, Ohio, and Pennsylvania arrange every nomination which the independent voter at the primary may record or not, as he chooses, with imperceptible influence either way upon the final result.

We may go further afield if necessary for examples of the degeneracy of the caucus. The "Birmingham Model," which was imported to England from the United States some sixteen years ago, is our caucus system adapted to English environment. The party "whips" naturally approve of the plan, finding it so conducive to the strictest party discipline. Mr. Chamberlain, for example, sings its praises in notes which strongly remind us of Senator Conkling, or Mr. Bliss.† But the sturdy Briton has

* A. B. Nye, of San Francisco, in New York "Nation," No. 865.

† "The Caucus," *Fortnightly Review*, 1878, p. 721.

already begun to fret under the paralyzing grip of the machine, with its attendant evils, "pledges," "discipline," and "assessments."*

Whenever we examine, we find the same results attending the development of the caucus system in all large cities and towns. That the mass of voters have no choice in the selection of the candidates who depend upon their ballots for election must be conceded. While it is true that the majority of intelligent men do not take such interest in these matters as the public good demands, do not "come out" to the primaries and attend the caucuses; while it may be true, as Judge Thayer asserts, that "hundreds of thousands of intelligent men to-day pride themselves upon their indifference to politics,"—are they to blame? Does any really "practical" politician believe that the respectable voter can "make his influence felt," as Judge Thayer demands, or that the primary of to-day is open to him, except as the term is defined by a gentleman who, writing of Syracuse, New York, says: "It is open to any one who will do the dirty work necessary to become a leader"? And how can it be otherwise? It is not a day, a month, or an evening, or two evenings a week that a man must give to do effective political work under the present system of our nominating machinery. He must give his whole time morning, noon, and night. Does Judge Thayer understand all that is required of a district leader in the city of New York? Or does he flatter himself that he could "make his influence felt" against "Barney" or "Jake" or "Mike" better than Mr. Schultz or Mr. David Dows or Prof. Dwight has done? Can Mr. Freshman who sparred so neatly at the Harvard gymnasium on the last Ladies' Day stand up for ten minutes in a twenty-four foot ring against Mr. John L. Sullivan of Boston?

With two-thirds of the Republican bosses in New York holding federal office, it is easy to see how politics can be made to pay; and we may reform, and reorganize and reënroll annually, quarterly, or monthly if we will, yet so long as we allow our non-elective offices, federal, State, or municipal, to be used as a reward for certain sorts of work, certain sorts of men will always be on hand to do it; and it is not the kind of work that Judge Thayer

* "The Caucus and its Consequences," *Nineteenth Century*, Oct., 1878; "Political Clubs and Party Organizations," *Ibid.* May, 1878. An unsuccessful attempt was made to "discipline" no less a person than Mr. Forster for his course on the Government Education Bill in 1878.

or Mr. Schultz or Prof. Dwight would care to do. Yet, under the present system, it is the only sort of work that tells. Let any one who feels as Judge Thayer does, that "his duty to himself, his country and mankind can only be performed by attending and making his presence felt at the primary meeting," attempt to carry out his convictions in Brooklyn or New York. Listen to the experience of an innocent gentleman who made the trial in the former city: "Together with two regular Republicans I repaired to the primary, to which I supposed all Republicans were invited; and although we were forty-year-old native citizens, accredited intelligent in ordinary things, yet to our surprise, not being members of the association, we had no voice whatever in a primary. We had gone on a fool's errand. I then learned that a few leaders had cut and dried matters, and that a host of men like ourselves, without the necessary wire-pulling knowledge and influence, would prove powerless even though we were members. Men voted for delegates and substitutes with a most absurd ignorance of what they might do. Until caucuses and primaries are conducted differently from this, I for one do not care to waste my time over them, however much I may deplore the dormant attitude it places me in as a citizen."

The nation has taken one wide step in aid of the needed reform. A large part of the federal offices will cease to be disposed of as "patronage." As Mr. Dorman B. Eaton has said, "the reform of the primaries is largely dependent upon the reform of the civil service." The same principle must be applied to State and municipal offices as well, so that another Tweed may not have it in his power to control the caucus of his opponents by his disposal of the places which he holds in his grasp. When the independent vote, which can at any time decide a national election or a State election, certainly in Massachusetts, Ohio, Pennsylvania, or New York, has secured this reform, has enforced the passage of statutes extending the operation of the general election laws to the primaries; when we punish fraud at the primary like fraud at the polls, and insist that all parties shall hold their primaries on the same day, at convenient polling places, open from sunrise to sunset; when we have extended the penalties against bribery, fraud, and perjury so as to cover all preliminary meetings, primaries, or conventions for the selection of candidates, so as to prevent the "heelers" "getting in their work in advance,"—then it will be time for Judge Thayer and men

who believe as he does to throw the blame for the decay of the caucus on honest people who neglect their public duties. But until we have thrown about the primary at least the same safeguards by which we protect the general election ; until the honest citizen can feel assured that his vote will be counted as cast, and that by time and attendance he can really do effective service for his country, without stooping to the dirty work which is admittedly essential to success at the primary to-day,—no man can justly be charged with neglect of his duty who declines to be a party to the farce. On the contrary, as matters now stand, he who, with a full knowledge of what is before him, continues to run about to ward meetings and district associations, deserves to be called either a fool for his pains or a knave for his purposes. When we have done all that we can do and all that we ought to do to give any sort of weight to the vote, voice, and work of the intelligent and honest citizen, and have ceased to say, in effect, that if he wants to be successful at the primary he must leave his honesty at home, it will be time for us to demand his attendance and to insist that his indifference means a speedy verification of Macaulay's prophetic warning.

GEORGE WALTON GREEN.

CONVERSATIONS WITH A SOLITARY.

PART II.

THE scene opens, as in the first conversation, at a small, fantastic villa in a remote part of the Island of Jersey. After an interval of three days, Franklin, the Radical member of Parliament, returns to visit his consumptive and dying friend Alison.

ALISON.—Franklin, can't you see me? Here I am in the garden. Don't ring the bell, but come around to me through the veranda, and shut the wire gate, so as to keep out the rabbits. How fresh and well you are looking! I am delighted to see you back again. And have three days been enough for your agricultural visitation of Jersey?

FRANKLIN.—One can learn plenty in three days, if one sets to work with a will.

ALISON.—So the Island has pleased you, has it? One can tell that by your manner. Well, on a morning like this, anybody might be pleased with anything. Look at the sea sparkling to the dreaming sky; look at the sunny downs on which the sheep glitter like so many dots of chalk. How fresh the flower-beds smell, like the very breath of Nature, our mother! And how voluptuously that great camellia-tree lifts its scarlet blossoms high to the moving air! Yes, on a morning like this, merely to live is pleasure.

FRANKLIN.—Where were you going when you just now caught sight of me? You were about to descend the bank, and my arriving stopped you.

ALISON.—Far below, at the foot of the cliffs facing us, is a fringe of rocks which, in this state of the tide, will be dry and warm with sunshine. I had meant to go down to them, and sit there for perhaps an hour or so, returning on a pony by a longer and less steep bridle-road. The best descent is by that steep path

amongst the tamarisks and the rustic steps that dive into the larch wood under us.

FRANKLIN.—Let me come with you. To bask on the rocks would be delicious.

ALISON.—This is the path. You had best be careful of your footing. When we reach the steps, all the rest will be easy. Now look back for a moment. Do you see the house above you?

FRANKLIN.—How far we have descended already! It is hanging over our heads like an eagle's nest and the lights of the red camellia blossoms are up in the sky, like stars. Now the larch-trees have hidden them. Why, this wood of yours seems to cling to a precipice.

ALISON.—A little lower, when we come to the thatched summer-house, if you lean over the railing in front of it, you will see the bay under you and the line of living foam that makes its restless crescent on the pebbles.

FRANKLIN.—What a depth! I should be giddy if I had not this bar to bear upon! Yes, there is the bay; and, what—boats, too, and smoke from houses!

ALISON.—It is nothing but a diminutive fishing village, composed of a few cottages. We shall pass in front of them presently, and when we look at them from the rocks, you will see how picturesque they are. One more flight of steps, and then we shall have reached the bottom. Tell me, why are you sniffing so?

FRANKLIN.—What a strong smell of cooking—of something being fried, I think!

ALISON.—Pah! I just then got a whiff of it. It must be close on the fishermen's dinner-time, and their chimneys are now just under us. The next turning will bring us to the shore and the pier.

FRANKLIN.—What healthy, well-dressed children! What clean and roomy cottages! How different from the hovels we should be looking at if this bay were in England! Before each door there is a little plot of flowers; and I noticed just now that, on the rising ground behind, there were a large number of excellent kitchen-gardens, with here and there what seemed like fair-sized cucumber-frames.

ALISON.—No doubt, no doubt. Jersey is full of gardens. But don't let us loiter; let us get out of the smell of the cook-

ing. This is the way. The rocks are not slippery. The place I want to take you to is that ledge at the point.

FRANKLIN.—Ah, I admit that this is beautiful. What stupendous cliffs! What spikes and spires of rock! And these caves and grottoes—how fantastic and dark with shadow; and as we come near them, how full of marine murmurs!

ALISON.—Do you notice that, as we lie here, we command two prospects of a wholly different character? On one side is our secret bay, with its hamlet and hanging larch woods; and on the other the open sea, with the houseless and treeless coast, haunted, one might fancy, by sea-nymphs safe from human intrusion.

FRANKLIN.—To me, too, if I sank deep enough into a day-dream, the sound of these waves might seem like vague whispers of the Odyssey. Do you ever catch a glimpse of Calypso in the shadow of the arch behind us, watching with grave eye for the returning sail of Ulysses?

ALISON.—Bravo, Franklin! You have been touched by the *genius loci*. I am pleased to see that there is still some poetry left in you.

FRANKLIN.—Ah——

ALISON.—What are you exclaiming at? Do you see the goddess? Have you detected in the gloom the tip of a white foot and a golden sandal pressed furtively on the dark green bulbs of the sea-weed?

FRANKLIN.—No, I fear not. My day-dream has already abandoned me, and I am looking now, not at the rocks and waves, but at the village and the ground above it. What I exclaimed at was the sight of that beautiful small valley that opens toward us its orchards and green pastures on the farther side of the larch wood.

ALISON.—No wonder it strikes your eye, as an agricultural inquirer. Those few acres you are looking at are one of the richest farms in the Island.

FRANKLIN.—And that pretty house with the gables, half-hidden by apple-trees and looking down on a bank of shaven turf—can that really be the house of the farmer?

ALISON.—It is, indeed. I hope you notice his conservatory. The place looks less like a farm-house than a kind of toy parsonage.

FRANKLIN.—Beautiful, beautiful! The whole scene is beautiful; the farm above, and the fishing village below. I could feast my eyes on it for hours.

ALISON.—Look, too, at the turrets of my villa, whose card-paper battlements just peep over the edge of the cliff. Seen from this distance, with the rest of the house hidden, they might really pass for parts of a genuine feudal castle.

FRANKLIN.—I am sorry you called my attention to them. To my mind, they are the one blot in the picture. They mar its harmony—its complete, its happy symbolism.

ALISON.—Come, Franklin, begin; I am waiting.

FRANKLIN.—Begin! Begin what?

ALISON.—Why, the bit of poetry which you look as if you were going to break out into.

FRANKLIN.—I was not thinking of any verses. Nevertheless, it is true that this scene affects me in a way I cannot describe to you. Alison, tell me one thing. Surely that smell of cooking we noticed as we passed the cottages must have been from frying bacon, or some sort of meat, certainly?

ALISON.—No doubt it did; these fellows are all great meat-eaters. But, good gracious me! what a nasty question to ask! Why spoil the scene and the fresh breath of the sea by wafting into it the greasy fumes of a kitchen?

FRANKLIN.—Your enjoyment is that of a dreamer and a diletante. Mine is not. I, like you, am delighted with the tints of the trees and pastures, with the gray crags, and the patterns on them of the lights and shadows; in my nostrils, as in yours, is the air that the sea-gull floats upon. But with these sensations, and with the pleasure they give me, that smell of fried bacon has nothing in the least incongruous. On the contrary, it is the very thing which, to my mind, gives them all their meaning. Just now you asked me to quote poetry. I will do so. This scene, Alison, if you could only read it as I read it, would

“Teach you more of man,
Of moral evil and of good,
Than all our sages can.”

Every detail in it—yes, even the turrets of your villa (for I have completely changed my mind about them)—has a distinct, articulate significance. And the whole forms, if I may be allowed to use the expression, a complete political pamphlet, written by the finger of Nature.

ALISON.—This is the first time I ever heard that a beautiful view was a pamphlet, or that the key to the voice of Nature was to be found in the smell of a frying-pan.

FRANKLIN.—Let me explain my parable. It is not a very obscure one. I am a tenant-farmer's representative, and I have come to Jersey, as I told you, to study the land system and its relation to the popular welfare. I have been more than paid for my pains. The condition of the country people in this island of small proprietors is prosperous beyond anything I had ever ventured to hope. There are no great domains, no lodge gates insolent with armorial bearings, no squalid villages cringing under manorial elms, with the very church an ornament of the lord's private pleasure-grounds. Instead, one passes by a succession of farm-houses and cottages, all of which, even the latter, are as neatly built as villas, and have, like villas, an indefinable air of independence about them. The roads, from sea to sea, seem to wind through a continuous garden. Jersey, in fact, represents what we Radicals think England ought to be. and the view before us represents Jersey.

ALISON.—It is a very fair sample, no doubt, of the scenery of the Island. You have here all the peculiar richness of the vegetation, and the houses have, somehow, an aspect which is more French than English. But, except for that, it might be in the North of Devon; and I fail to see in it anything suggestive of a Radical revolution.

FRANKLIN.—Were the ground we are looking at in England, who do you think would be the owner of it? Some lord or squire, who in any moment of wantonness might name the day when all the inhabitants should be exiles, and that farm-house and these cottages be so many roofless ruins.

ALISON.—Do you think that in England such a catastrophe is of common occurrence?

FRANKLIN.—I do not say it is; but it might be, and the people know that it might be. No matter practically how secure they are, they feel that their security depends on the will of another, and they pay a constant rent for it in the shape of a degrading recognition that it does so. And with what result? It is only too apparent. Their hearts gradually are being uprooted from the soil, although their bodies are not; and hence the smallest inducement is sufficient to attract them into the great towns. Hence the rural depopulation of England; and hence, in a great measure, the decline of English agriculture.

ALISON.—My dear Franklin, do you seriously believe a single word you are saying?

FRANKLIN.—Does what I say sound so strange to you? There is surely nothing new in it. It is what all sound Radicals have been saying, certainly for the last five years.

ALISON.—I know it is; and the impression you convey to me is that you are simply repeating a lesson by heart, after them, without having ever inquired into the truth or even into the meaning of it.

FRANKLIN.—The scene before us shall speak for me, and you shall now see why I called it a political pamphlet. Contrast these cottages, contrast that farm-house with a corresponding farm-house and corresponding cottages in England. The cottages: look at the clean lace curtains in their windows, and the green Venetian shutters; above all, recollect the evidence our noses gave us of the substantial nature of the meal which the inmates must be at this moment eating. An English fisherman lodged and fed like that? Would the tenant of a few acres in England have a house which, as you say, is like a parsonage, and a garden and a conservatory fit for a suburban villa?

ALISON.—I quite admit that if this place were in England, neither farm-house nor cottages would be quite what they are here.

FRANKLIN.—Precisely; and why is that? Can you possibly doubt the reason? Here the soil belongs to the men who occupy it. As Arthur Young long since observed, where such is the case, they will turn a wilderness into a flower-garden; where it is not, they will let a flower-garden relapse into a wilderness. There is the whole Radical gospel with regard to land in brief for you, and this lovely nook we are looking at is a living demonstration of the truth of it. Do you doubt it? But wait before you answer me. You Conservatives, in your vague horror of us and our hopes of progress, imagine that we wish to upset and ruin everything; that we would have no wealthy or leisure classes, who should cultivate knowledge and the arts, and devote themselves as I, in my humble way, am trying to do, to the general advancement of society. But you are wrong. We Radicals have no feud with wealth, nor have we any desire for a Utopian equality in the division of it. I do not quarrel with those cottages because they are not so large or so elegant as the farm-house, nor with the farm-house because it is not so large or elegant as your villa. Your villa, it is true, as a feature in this particular prospect, did at first offend me a little. As you said, to the eye of fancy

it suggested a castle and the incubus of an aristocratic landlord. But, on a second glance, I saw it in a different light; and what you so aptly call its card-paper turrets and battlements now seem to me not an embodiment of feudalism, but merely a playful, if somewhat contemptuous, caricature of it. They represent modern wealth smiling with amused good humor at obsolete rank and privilege.

ALISON.—I doubt if the man who built the turrets would be pleased at the interpretation you put upon them.

FRANKLIN.—In that case, then, they are like most other symbols. Their truest meaning is an afterthought, and would be a scandal to their first inventors. Well, are you able to read my political pamphlet now? Look—we have before us every rank—no, not rank; I mean every condition of life represented. Your villa represents the condition of the leisure capitalist; the farm-house, the condition of the working capitalist; and the cottages, the condition of the laborer who reaps the fair reward of his labors. Each of these three conditions is to the Radical equally sacred, is deserving of equal respect, and invests a man with equal rights and privileges. Now, then, let me put my question to you. Is Radicalism such a terrible or such a visionary thing after all, since a scene like this is a type of what the Radical aims at? And so far at least as the land question is concerned, does not that scene convince you that the Radical is right?

ALISON.—I should be exceedingly sorry if every country house in England were to be what you say my villa up there is—a vulgar joke in stucco at every thought and feeling.

FRANKLIN.—I never said *vulgar*; I said good-humored.

ALISON.—Very well, then, a good-humored joke in stucco at every thought and feeling that makes the life of a rich man respectable.

FRANKLIN.—What!—But never mind; we will talk about rich men presently. Let us confine ourselves first to the cottages and the farm-house. There they are; you see them; and I ask you if, on your own admissions, they are not proofs of the beneficial effect of ownership as contrasted with that of your wretched feudal tenancies? Why are you smiling?

ALISON.—Jersey, as you say, is an island of small proprietors; the people, as you say, are for the most part singularly prosperous; and you could find no prettier example of their prosperity

than what we are now looking at. You will take it as a text, no doubt, for some future speeches about the land laws.

FRANKLIN.—I shall, most assuredly. Upon my word, I cannot see anything to laugh at in that.

ALISON.—I don't want to laugh, but I really can hardly help it; for it so happens that that very farm and those very cottages you admire so are not the property of the farmer or of the cottagers at all, but belong to a certain banker, of whom I rent my villa, and are held from him exactly as they would be held in England. Please forgive me. It is very rude, my laughing. But if a little thing sets one off, it is sometimes very hard to stop oneself.

FRANKLIN.—I don't grudge you your laugh; only, as soon as you are able to listen to me, allow me to say a word or two. No doubt that you think I have been very neatly caught in a trap, and I am quite aware that, for the moment, I must seem in a ridiculous position; but let me explain myself. I do not, of course, maintain that, apart from other considerations, a man gets more for his money by buying his land or house than by renting them. We Radicals do not look on landlords as robbers, nor should we wish to expropriate them without full compensation. Commercially, the relation of squire and tenant is sound enough. Like the opium trade, its evil is in its consequences. The popular degradation and the material loss it causes are not due to rent being a robbery of the fruits of labor, which it is not, but to the roots of labor being injured by the position which the rent-payer occupies. He is enervated with a sense that dependence and inferiority are his birthright, and he suffers, not because his money, but his incentives to make money are taken from him.

ALISON.—There are still a certain number of yeoman farmers in England. I doubt if you will find them more prosperous, or indeed different in any way from the tenants.

FRANKLIN.—That is the very point I was myself coming to. Amongst the agricultural classes in England, tenants form an immense majority, and their social conception of themselves is thus caught by the minority of freeholders. The same thing happens always. Make a banker a peer, and he will strut as if he owned a county. Now, just as in England the small proprietor has much of the character of the tenant, so here in Jersey I conceive the tenant will have much of the character of the small

proprietor. What you tell me, therefore, as to the particular farm and the particular cottages we have been speaking about by no means destroys the inference I have drawn from them, though I must own, in honesty, that it makes it less striking and direct.

ALISON.—At our last meeting, you remember, we were talking about Radicalism and Democracy, and we said when we met again we would go on with the discussion. Here we are plunged in the middle of it already, and I have got you, quite by accident, on one of the very parts of it which I most wished to bring you to book about. I am delighted with your forbearance when I began to laugh at you; and I recognize that, from your own point of view, your answer is perfectly just.

FRANKLIN.—My point of view, then, is still not yours? To own one's home, to take a pride in one's home —

ALISON.—My dear Franklin, not so fast. You must tell me a great deal more before I can compare your point of view with mine. As to one thing, however, you re-assure me greatly. Landlord as I am, you do not think me a robber. I am not a criminal because I accept my rents. I wish to know, then, why it is I am an abuse, because money which you have no wish to rob me of is invested in this particular way.

FRANKLIN.—I can conceive of the land system being so revolutionized that money might be invested in land to almost any extent, and yet no result ensue with which any Radical would quarrel.

ALISON.—Do you mean by arrangements that would secure fixity of tenure and free sale to the tenants?

FRANKLIN.—It would be a step, no doubt, in the right direction to have the landlord a mere rent-charger on his estate; but that would not be nearly enough. His house and park would still be there; they would still permanently connect him with the neighborhood, and make him permanently the central and most prominent figure in it.

ALISON.—Then, ought no rich man to have a house and pleasure-grounds in the country?

FRANKLIN.—You mistake me. I have not the smallest objection to that.

ALISON.—You altogether bewilder me. I can understand your objecting on theory to a landlord's being able capriciously to evict his tenants; but supposing him to live on his estate as

a mere rent-charger, why should he be more obnoxious to you than if his money came from a cotton-mill?

FRANKLIN.—I will tell you. In the latter case, his position would be as separate from that of his neighbors as if he merely lived in a large house in a street. But once let it be known and felt that his money comes from the fields and the farms surrounding him, then, no matter how much his powers are limited, his name and his personality become identified with the neighborhood, and the very slopes of the hills which bound the horizon of the villagers seem, somehow, to exist for him. The moral effect of this single fact is incalculable. His neighbors are no longer neighbors, but supporters, tributaries —

ALISON.—Pardon my interrupting you. But will you allow me to ask what are those conditions you spoke of, which would make land, in your eyes, a legitimate form of property?

FRANKLIN.—A great deal would be done, could it merely be made illegal for a man to live amongst the acres in which his own money is invested; but the sole arrangement that would fully meet the needs of the case would be one that would place the land in the same position as the funds. You would invest your money, and you would receive your interest or your rental; but you would be unable to connect this with any special locality, or to tell any one whether your property were in Cornwall or in Caithness. I don't say, remember, that this scheme is practicable. I mention it only to show you that the Radical's disapproval of landlordism has nothing to do with envy or disapproval of property as such. Supposing the revolution I have just described to take place, it would virtually amount to this. The Government would buy up all the land from the landlords, and the landlords would buy back their interest in it, in the form of stock, from the Government.

ALISON.—The only economic change, then, would be this: the Government would become the landlords' rent-collectors. I fail to see what benefit that would convey to the tenants.

FRANKLIN.—Have I not told you already that we want to rob nobody and to make presents to nobody? The change we desire is a moral change, not *novæ tabulæ*.

ALISON.—And, so far as I can make out, the only moral change you would produce would be to deprive riches, as I too have told you already, of everything in them that makes a rich man's life respectable. Should I, for instance, be looked up to

—should I deserve to be looked up to by anyone, if the gray gable of my own home in England represented nothing to those about me beyond the fact that I had more money than they?

FRANKLIN.—Everything turns upon that one question. Why should you be looked up to? Why should any one of us look up to any other? It is precisely those upward glances that we Radicals wish to abolish, and we hate the English land-system because it is mainly responsible for their continuance. Yes, I repeat the word, we hate it. It is the canker of our national life. You seem surprised at my warmth. I will do my best not to excite myself. But tell me, do not you too, at the bottom of your heart, think as I do? You spoke just now of what makes a rich man's life respectable. You cannot mean what your words, as you used them, seem to mean! You cannot mean that one man's dignity depends on another man's self-abasement! Is your own position respectable only because peasants you disdain to speak to touch their hats as you pass them? Or, is it at the mercy of any farmer who should presume to be at ease in your company?

ALISON.—The signs of respect you talk of are of as little value in themselves as the Apostles' Creed is, regarded as a series of verses; nor should I regret their ceasing, unless it meant the ceasing of what they signify. What that is, you do not seem to understand. So far, however, as self-abasement goes, I should have thought your experience in the United States must have taught you that it is possible to bow to wealth derived from trade quite as low as to wealth derived from land.

FRANKLIN.—I am no apologist for the worship of vulgar luxury, but it is harmless when compared with the reverence for territorial rank. The one is a mere weakness; the other a pernicious superstition. I seem not to understand what that reverence is, you say. My good friend, I understand it too well. There is a certain noble marquis—a relative of your own, I believe—on whose noble lands I had myself the honor to be born. I was beaten by my father once for not taking off my hat to his lordship. I do not know, you think, what that reverence is! Oh, I remember to this very hour the hushed tones of my mother whenever she spoke of the castle or any of its inmates. Have I forgotten, do you think, how we used to call them *the family*? *The family*—as if we were not a family, also!

—as if about them there were not a hundred families! We all laugh as we think of the French king who said *l'état c'est moi*. But every English squire to-day says something worse than that: he says *le voisinage c'est moi*.

ALISON.—And if he does, what then? He means merely that he owes his neighborhood duties as a return for its owing him rents; that his relations with his tenants, in fact, are personal as well as commercial.

FRANKLIN.—Duties! One would think, to hear you, that men like my father were children. Such duties as those you talk of are an insult, a presumption, an impertinence! The people ask for none of them.

ALISON.—Should the rich then give no help to the poor? Would you have no charities?

FRANKLIN.—We are not talking of charities. To these let all contribute, each in proportion to his means. My father subscribed to the county hospital just as regularly as did my lord the marquis, and on precisely the same principle. His lordship's subscription was naturally far the largest; but what had this to do with any duty, on his part, to my father? What personal relations with him—that is your phrase, I think—did it imply? Ah, my dear Alison, you look upon me as myself, a man of the people, and you find a little difficulty in telling me what you really mean. But I am not so squeamish. What are these duties of yours but so many acts of condescension or of interference, the chief aim of which is the display of your own superiority, or which, if they court gratitude, court it merely as one form of submission?

ALISON.—Let us put personalities out of the question. No noble lord would presume to think he had any duties toward you now. Let us content ourselves with speaking of the tenant class generally. Answer me this: is it not better for both parties that the landlord should wish his tenants to prosper for their own sakes, not merely for the sake of the percentage he draws himself from their prosperity?

FRANKLIN.—Such a gracious wish would, no doubt, do great honor to his heart; but I fail to see that it would do the least good to the tenants.

ALISON.—This paternal feeling I speak of —

FRANKLIN.—You have said it at last! Yes, I knew that was your meaning. What right has a man, because I hire a piece of

land of him, to treat me as a child and insult me with his airs of paternity?

ALISON.—I was about to quote the well-known observation of De Tocqueville's, that in countries where this paternal feeling exists amongst the land-owners, rents are always lower than in countries where it does not.* That is an advantage to the tenants, surely. You must at least admit this much.

FRANKLIN.—On the contrary, I altogether deny it.

ALISON.—Deny it! Deny what?

FRANKLIN.—Not what De Tocqueville says. That, I think, is on the whole true. My father's farm, I know, was considerably under-rented. What I deny is, that this was of any real advantage to him. He might have been a richer man had he paid a higher rent, could he only so have rid himself of all such dependence; could he have looked on the noble marquis from whom he hired his house and acres as the noble marquis looked on the man from whom he hired the canvas ball-room in which we were mustered to expose ourselves in honor of his son's majority. To make a long matter short, what, as a Radical, I complain of is not that land-letting is unjust as a piece of business, but that under the land-system now existing in England it is impossible to make it a piece of business only.

ALISON.—Not even by security of tenure and free sale?

FRANKLIN.—You have asked me that question already, and I have answered no. Unless they tended to break up the large estates, the arrangements you speak of would not touch the root of the evil. The rich landlord would still be the patron; the comparatively poor tenant — Is there anything on my coat? What is it you are looking so hard at?

ALISON.—My eye was caught by your magnificent pearl scarf-pin. I was unable to help staring at it.

FRANKLIN.—Such things are little in my line. I bought this out of kindness for a small jeweler whose business seemed to be leaving him, and who was in daily fear of bankruptcy.

ALISON.—May I ask you a very rude question? Was it a great bargain?

* De Tocqueville observes that if a man owns a hundred acres he will try merely to get all the rent he can from them; whereas, if he owns a hundred farms, he will, at least in aristocratic countries, aim rather at securing the attachment of his tenants.

FRANKLIN.—On the contrary, I paid for it a good deal more than its worth. I was dealing with the man at the price as a pretext for giving him some assistance.

ALISON.—Hah! my friend, I think I have caught you now. Was that little matter a piece of business only? Were not you the patron, and was not the poor jeweler the patronized?

FRANKLIN.—I admit that this special transaction was more than a piece of business, and if you like to call kindness patronage you are free to do so. But had I really wanted the pin, and given no more than a fair price for it, there would have been no patronage on my part then; whereas, under equivalent circumstances, on a landlord's part there would be. Besides, practically, so far at least as pleasure goes, my friend the jeweler and I are by this time quits. Do you see this silver match-box, with my monogram? Two years afterward he sent me that as a present; and, slight as its worth in money is, I can assure you I am repaid five-fold by it.

ALISON.—You will think, perhaps, that my talk is a little wandering; but of all trades I think farming the most desirable.

FRANKLIN.—I don't catch your train of reasoning, certainly. Why do you think so?

ALISON.—You mentioned that your jeweler was in danger of failing. Now, farmers never are; they are never even in difficulties.

FRANKLIN.—You astound me. You are a landlord, and you venture to say that! On the contrary, of all classes, farmers are in difficulties oftenest.

ALISON.—Such being the case, then what should a landlord do? Should he treat his farmers worse than you treated your jeweler? And should his farmers treat him worse than your jeweler treated you? My good friend, I think I have caught you a second time.

FRANKLIN.—It is not perhaps easy to answer your retort off-hand; still, if we were talking merely with the intention of catching each other, I might reply by asking you if the dignity which you admire in a landlord is a dignity which is founded on the necessities of his tenants?

ALISON.—And I should reply that the moral life of every one of us is founded on nothing but the necessities of all our neighbors. Surely you, who are a worshiper of humanity, will be the

last person to doubt or deny that. Duty is something more than mere commercial honesty; indeed it only begins where commercial honesty ends. This is not true only as regards man and man. It is equally true as regards class and class.

FRANKLIN.—With this difference, that between man and man the code of duty is no respecter of persons; between class and class it is a respecter of nothing else. In the one case it is based on a natural moral equality; in the other it is based on artificial social distinction.

ALISON.—You told me the other day that you valued your own wealth because it enabled you to feel that you were at work for multitudes. Have you, then, as a rich man, no special duties? And yet is not wealth an artificial social distinction?

FRANKLIN.—The same question again! It seems I shall never explain myself; and yet I will try once more. No—wealth in itself is not a social distinction in the sense that landed wealth is in a country such as England; and its duties are not special. I helped my jeweler because I was a man, not because I was a rich man. My riches were merely the accident that gave me the means of helping him. But landed wealth—let me contrast, for instance, the position of a large landlord with the position of a large mill-owner.

ALISON.—Pray do.

FRANKLIN.—The mill-hand regards the mill just as the owner does. To each it is nothing but a means for making money. Accordingly, the subordination of the former to the latter is a purely official thing. It ends daily with the hours of work, and forms no part whatever of the workman's private life. But to the dweller in the country, each field and meadow has a place in his innermost affections, is mixed with his hopes and memories, and is a part of his very existence. Thus the landlord to whom he pays a tribute for every hedge-row and every hawthorn takes in his mind a place equally permanent, and his superiority seems part of the general order of nature. Well, the result is this: The mill-hand regards his master as a luckier man than himself; but, apart from that, he thinks him merely his equal. It never strikes the farmer that his landlord is lucky at all. He regards him simply as a different order of being. The mill-hand thinks the master has a finer house than I. The farmer thinks, considering what his lordship is and what I am, our different houses, for us, are alike, the one about as fine as the other.

ALISON.—And what happier picture could you draw of the feeling between class and class? My one regret is—my bitter, my ceaseless regret—that this feeling you describe is vanishing.

FRANKLIN.—It would have vanished long ago if we could have had our way. We began this discussion as though the question involved in it were nothing but the relative positions of landlord and rural tenant, but in reality it affects the entire progress of society. You say I must know, from my experience in America, that the slavish reverence which in England exists for rank can be excited by riches also. True—that is so; but why is it? It is because the feelings engendered by European feudalism still survive to poison the relations of all classes and to confuse the idea of rich and poor with the idea of lord and vassal. These feelings it is that we Radicals regard as the chief of social evils; and it is with a view to their destruction mainly that we are working for a reform of the land-laws. Our object is not to pilfer from the landlords a pitiful percentage off their rent-rolls. How would the abolition of primogeniture help us to accomplish that? No, the social revolution we aim at is moral, not financial. We do not ask that all men should be equally rich, but that all should be equally independent. We ask that the poorest man shall feel no fear of the richest, nor shrink from offending or disregarding him.

ALISON.—We are fast enough coming to that condition now.

FRANKLIN.—We are progressing—yes; and, as I am trying to impress on you, the remains of territorial feudalism are all that now hinders us. We shall never cease from our agitation so long as there are still men in England whose sole legal hold on the homes and scenes of their childhood is the thread of a yearly tenancy, which, for any caprice of a moment, the landlord might snap forever.

ALISON.—And yet the same families, on no other tenure than this, have, in many places, held the same farm for generations.

FRANKLIN.—Such cases are the worst of all. Morally, no doubt, the tenants feel secure enough; but the more secure they feel, the more dependent they become; the more is their life bound up with a confidence in their landlord's good-will to them.

ALISON.—Are you mad, Franklin? What else would you have? Is not all that is best and truest in the life of each of us based on this same confidence and on nothing else? In what

tenure, let me ask you, does a man hold his wife's affections? a father, his son's? a friend, his friend's? Mutual confidence and mutual need—is not one the bond and the other the very source of society? They are so between man and man. They are so, also, between class and class; and just as they constitute in the former case the life of a private circle, so in the latter do they constitute the life of a country and a civilization. This life, like any other life, is subject to disease; but life and disease are not the same thing. You Radicals think they are. You would try to reform a libertine by teaching him not to love. If a heart beat irregularly, you would plunge a knife into it. That is what you are doing, or trying to do, to England. I am glad that my days are numbered, and that I shall not be in at the death. But see—there is the boy with the pony come for me. After luncheon, we will go on with our discussion again.

W. H. MALLOCK.

THE LIMITATIONS OF FREETHINKING.

THE bane as well as the boast of this age is intellectual pride. The volume of our conceit is sometimes in the inverse ratio of the sum of our consequence; and in the absence of all other claim to importance, we can be proud even of our pride. But ours is not a vain conceit; there is in our bounding self-assertion the pulse of lofty consciousness and the tickling testimony of the century's "well-done." We can demonstrate that we have wrought many and great changes in the social and material conditions of the race; and with every change we can point to a corresponding improvement. We have entered on a path of discovery that must eventually lead to the recovery of the lost unities of nature. We have solved many of the knottiest problems of society; and among our happiest exploits, we can boast of having unearthed the long-lost truth, that humanity is one and indivisible, bound up in unity of origin and indivisibility of destiny. We have broadened and deepened the foundations of society, and upon the bed-rock of nature's postulates have laid the broad base of the political edifice—that grand architectural *chef d'œuvre* of manhood's maturity, redeeming the infant promise of Babel, and offering shelter and security to all classes and conditions of men; a structure nobly planned; in conception vast; in proportions, majestic, solid, and enduring. We have re-adjusted the social relations, abrogating some that were old and creating others new. Our civilization is a re-assertion of manhood's original "bill of rights," and the words master and slave are heard no more. We have made inhumanity a crime, and substituted for deeds of philanthropy the works of social justice. Love and mercy remain, but we have given them the nobler and holier names of right and duty. By narrowing the circle of the sentimental and gratuitous we have secured every just claim of man, without making him a mendicant on

anybody's bounty. Our civilization is, moreover, the common heritage of the race; and every man, woman, and child on earth is heir to its blessings, share and share alike. We acknowledge neither caste nor class privilege; the unit, man, is the basis of our partition.

But is this really the unit? There are in every man two lives, as distinct as if they were not united in oneness of personality; two natures that live apart, each subject to its own laws of health and development. There are in every man a Jacob and an Esau, who struggle for the mastery from their issuance, and even in their issuance from the womb. Multiply the number of men now living by two, and you will have the whole number of individual human lives throbbing with present hope or writhing in the agony of past disappointment. We still have in our civilization a "relic of barbarism" which gives to the material man the promise, and to the intellectual man the pottage, of the age's inheritance.

Without going to the absurd extreme of denying the existence of external objects and reducing the universe to the limits of personal consciousness, we can safely say that man lives chiefly and preëminently in his own thoughts. The senses are but delvers in the mines of matter, material light aiding in the work of discovery. They come back laden with the ore of experience, which, by reason's dissolvent, is reduced to the gold of knowledge. The spirit of man scorns contact with earth. The mind itself is no vagabond; like a hermit in his cell, it sits and sifts the reports of those viewless couriers of thought who wander evermore. Man's outward seeming, his visible life, his actions on society and society's reactions upon him, are but the non-committal utterances of the mind's diplomacy, the cautious official bulletins from the camp or court of our interior life. Every human life is a little kingdom, whose fixed policy is the maintenance of the balance of power between clashing domestic interests. In human life, the fairest side is always out, and a calm exterior often conceals deadly strife in the heart's distracted household. We have introduced civilization into warfare and subjected to law the commerce and comity of nations. Is there no law to reach this dark council chamber where man holds mysterious communings with his thoughts? After the mind dismisses its ministers of sense and wraps itself about in the mantle of its sovereign individuality, can it claim emancipa-

tion from all law and freedom from all restraint? Is the thinking man a thoroughly lawless and irresponsible being? We think not. The multitudinous progeny of the brain are not wild tribes in the republic of letters, without laws or reservations. The principle that "the king can do no wrong" does not apply to the autocrat of letters.

Thoughts have their ethics as well as deeds. A man has a right to his opinion; but not always. He has a right to his opinion if his opinion is right. Perhaps that opinion is born of ignorance; if so, to say that he has a right to the opinion is to assert that he has a right to the ignorance. That opinion may be the result of prejudice, and he has no more right to hold the one than to entertain the other. A man has a right to hold a right opinion, and the further right to be righteously disabused of a wrong opinion. Human laws, in regulating the external actions of men; but formulate the civilization that enacts them. But they only regulate the conduct of men toward each other. With acts that begin and end with the individual, and which nowise affect the rights of others, human laws have nothing to do. Laws are expedients. What instinct does for the lower animals, in securing for them peace and plenty, that human laws do for men. The most perfect laws the world has known or can know but guarantee to man what instinct secures to the brute creation. Not only the bees and the ants live in a perfect society, but the bears and the vultures enjoy the luxury of good government. In the vast wilderness, where the foot of man has never trodden, the savage beast enjoys a law which its instinct, could it think, would formulate into our "*Salus populi suprema lex esto.*" But there are fountains of law far beyond the reach of the human lawgiver, fountains of freshness and purity from which only the conscience can drink. Beyond our high and grand civilization there is a higher and grander still—the civilization of the cultured soul. The ages of the world most renowned for their material civilization were oftentimes eras of exceptional brutality. The most polished nation in the world is the French; yet a French duelist will withdraw his rapier from out the heart of his antagonist, executing a blow the while that would make a society actor turn yellow with envy. The Antonines sought solace from the cares of state by witnessing a butchery in the amphitheater, and in the days of cultured Greece cripples and idiots were outside the protection of the laws.

The war-whoop of the intellectual savages of our time is "Free Thought." This is the most laconic paradox ever uttered. By thought we are to understand the assent of the mind. Now, conviction gravitates to truth, when demonstrated, just as infallibly as water seeks its level or bodies fall to the earth. It is not in the power of the human mind to deny a truth once its existence is demonstrated. If freedom of thought means liberty to impugn the known truth, then to be mentally free we have but to apostatize from reason. If by "Free Thought" we are to understand emancipation from system, we are guilty of greater absurdity; for to accept a system, and, at the same time, to deny what follows from it, is to believe that a thing can be both true and false in the same respect. If every thinker is bound at the outset of his career to abjure all systems and theories and generalizations, we shall never get away from the A B C's of knowledge. If we mean that we must not be bound to a system or theory until we have proved its truth, we may ask what power can shackle the faculties of the mind? What court can issue, what minion serve, a writ upon reason? What prison bars can contain an idea? But, perhaps, we are to understand freedom of thought to mean that man is not accountable for his thoughts. I have shown that thoughts are the most human of human acts; now I will try to prove that they are subject to the common laws of human ethics. A man who reads a libel, knowing that it has been adjudged a libel by a court of competent jurisdiction, is guilty of an offense before the law. Why? Because the law holds that every man of good repute has a right in his good name. What honest husband, finding the groundlessness of the suspicion he has harbored against his innocent wife, does not feel his conscience smite him, and urge him to make confession and seek forgiveness? The injurious thought may never have found lodgment in the eye, may never have been fondled by the quivering lips, may never have risen on tiptoe to the ear; the heart gave it room, and that is enough to make him hate himself. What grander asseveration of constancy can man make to doubting woman than to say he never injured her even in thought?

But is the mind absolved from law when it soars to the realm of pure thought, when roaming over the fields of speculation, fancy free? Ah! here man feels like a god; he creates new worlds with every fiat of conception, and the law of their

life is an emanation from his own thinking essence. The realm of purest thought should be the field of the loftiest morality. Des Cartes would have us believe that the world of thought is a region of ceaseless tempest, abysmal darkness howling to the abysmal dark; that the only safe retreat for the tempest-tossed mind is the eyrie of universal doubt. That sounds like the Johannic "In Principio" of the gospel of despair. It summons the naturally religious soul to commit suicide on the altar of a stone-eyed philosophy. Man could not be a rational being without a free will. All laws, human and divine, are but the dictates of truth; they emanate from practical reason and presuppose freedom of choice. What civilization is to human conduct, that the ethics of the mind is to human thought. But a man may be socially civilized and in thought a barbarian; and, *vice versâ*, intellectually a gentleman and socially a boor. Whited sepulchres are not always the men who wear a fair exterior and are inwardly knaves; they, too, deserve the name who have the hearts and habits of men, but in blasphemy resemble the demons.

Barbarism is distinguished from civilization by a certain wild pride and independence that brook no control; a total disregard of others' rights; a callous indifference to the infliction of pain, and a general uncertainty and unfixedness of property tenure. A barbarous society is one based on the maximum of selfishness consistent with individual safety. An intellectual barbarian roams over the world of thought as if it had never been surveyed or portioned in severalty. He respects neither ownership nor occupancy. All theories, all systems, all general principles, he considers the usurpations of intellectual feudal lords, and he strikes at the grasping aristocracy of thought. As all property is robbery to the Communist, even so is all principle usurpation to the Freethinker. It is not strange, therefore, that we find Communism and Free Thought indigenous to the same social soil and thriving under similar atmospheric conditions. The intellectual barbarian sees chains in social customs and tyranny in all social order. The vast ramifications of human interests claim no consideration from him: although the grandest and best institutions of society should be buried in the fall, he boldly lays his ax to the root of the tree, nor recks the cost. What to him the truth, so patent to other people, that principles underlie morality, and morality

is the basis of society? What cares he for the abstract proposition, that without morality even civil government is impossible? He answers you with the hoarse shout: "*Fiat libertas; ruat imperium;*" and he straightway lays his intellectual dynamite at the foot of the social arch. He swoops down like a literary Attila on the fair provinces of conservative knowledge, his feverish activity stimulated by feelings akin to those ascribed to Blücher when that burly soldier first entered London. A book by a Free-thinker is a store-house of booty, collected during a life-time of literary outlawry.

The literary savage, too, loves to inflict pain. The holiest relations of life, the fondest conceptions of duty, the dearest creations of philanthropic fancy are the objects of his malignant destructiveness. In common with all savages, he requires a vast territory to roam over. A Freethinker dabbles in theology, philosophy, political economy, history, physics—in any and every study that can be reached by a bullet of blatant negation. He is a slave to a master. No savage Indian ever obeyed his chief with half the alacrity that literary braves show in following their chosen leaders. They are the veriest slaves of certain literary dictators. The Tecumseh of the theological tribe is Voltaire. The Sitting Bull of the political tribe is Paine. The Logan of the scientific tribe is elective, the beads and feathers being generally awarded to the latest God-killer.

The people who have kept pace with the development of civilization will understand that the social world is one of law and order, in which individual sacrifice contributes to the strength and safety of the commonwealth. The same law of compensation holds in the world of thought. A savage is proud and self-reliant; a civilized man is modest and prudent, even to timidity. The wise thinker knows that his knowledge is a little dim light visible against a dark and illimitable background of the unknown. There is a capital X in every mental conception. What we first apprehend by the senses and afterward comprehend by reflection is the thing nearest our intellectual vision; stretching out and away to the vast horizon and beyond lies the infinite unknown. Every thought of man is a single reflection. Change the angle of vision, and it becomes a mixed image; above and about the picture, yet blended with it, are the bold outlines of his shortsightedness and insufficiency. The philosopher who said, "This only do I know, that I know nothing," was not guilty

of so great a paradox. Blind pride may battle against the conclusion; baffled inquiry may clutch at the intangible entities that lurk behind phenomena; but to the one inevitable conclusion all insurrectionary reasonings must come at last. Man is himself enlightened, but the light that illumines him is not man. To abolish all reciprocity between the natural and the supernatural, men have tortured their reason into all manner of Procrustean theories. Take this one, for instance: "*Dubito; ergo cogito. Cogito; ergo sum.*" Here is a marvel of deduction more violent than any the wildest superstition teaches: absolute certainty born of absolute doubt; luminous day begotten of Cimmerian night. A man who, to convince himself that his eyes are not channels of vision, should pluck them out, would not be guilty of more stupendous folly. Yet from this germ has the whole field of modern philosophy been overgrown. This is intellectual suicide—an apostasy of reason. From the first moment of consciousness the mind travels in the border-land of the infinite; and as Columbus inferred that there must be a continent lying off to the west from the drift-wood borne on the waves, so the honest thinker must know that there is the infinite beyond from the broken fragments of truth that drift upon the shores of sense. The man who sublimely thinks must profoundly adore. To him, the boundless sky of speculation is a symbol of infinity, and he bows his head and worships. A little humility is an unfailing antidote for universal doubt.

Men have vested rights in their thought, as they have valid titles to their property. If rights, duties also. And rights and duties are not mere conventionalities. A shipwrecked crew, cast upon an unknown and uninhabited island, will not hesitate to punish crimes against which, in organized communities, laws are enacted. In cases of crimes committed against the laws of the land, the accused has the right to a full, fair, and impartial hearing. In the republic of letters, no man should take the law into his own hands. Private vengeance is wrong in letters as in law. We must be just in our thoughts when we have to do with the thoughts of other men. When sitting in judgment on our literary neighbor, we should remember that possession is itself a right, and that the thoughts we judge are in possession. Two wrongs make not a right in law or letters. The man who originates and gives to the world a dishonest thought is guilty of a high crime against the peace and majesty of sovereign

reason. The man who publishes to the world an ignorant conclusion is guilty of a literary misdemeanor. The injunction to prove all things, and to hold fast that which is good, is the first and the greatest commandment to the thinker. There is modesty in letters. The best interests of the literary commonwealth demand that the accused thinker be tried by a jury of his peers. The greatest scandal of letters is the habit of literary tyros and novices of summoning before their ignorant bar the great thinkers of the world. When Jehovah threatened to give the Israelites boys for princes, he menaced a state of confusion that has been realized in this literary age. Especially in the inexact or speculative sciences is this scandal to be seen. It requires a skillful navigator to essay unknown seas, and only he who has traveled long and safely the ocean paths marked on the chart can hope for success in exploring untried waters. Only the expert can prospect successfully beneath the earth's unviolated crust. In like manner, only he who has studied long and well the exact sciences can safely and profitably delve in the mines of speculation.

There is piety in thought. The "*laudator temporis acti*" is always a taciturn individual. The man who of all men talks loudest and longest is the self-appointed spokesman of a shallow-minded age. What was said by Johnson of the work of a writer of his day is true of much of the literary product of our time: "What is good is not new; and what is new is not good." A passion for novelty in thought and expression oftentimes makes us victims of cruel deception. What we accept as genuine literary coin is frequently the basest of counterfeits. Great men and mighty thinkers were in this world ages before we were born; and centuries after we are gone their names will be repeated, and greater thinkers still will look across the lowlands of our commonplace to those still towering eminences, wondering how nature can rob a million men to make one great man. They will wonder more if they discover any specimens of our ephemeral literature to find how little, of all we know, we credit to the sources from which it sprung. We study nature more than the ancients; but the ancients studied man more than we. The field of ancient thought was not uniformly fruitful; ours is rankly luxuriant. But we should not forget that their skies were not as kind as ours; yet, under exceptional conditions, there grew in those by-gone days lofty intellectual cedars, whose roots, grasping the solid rock of everlasting truth, have held fast

during the storms and tempests of the intervening years; and they stand bold and erect to-day, monumental of an age of God-like thinkers. We should treat the thoughts of contemporaries with justice; those of the ancients with justice and reverence.

All thought is imperial. In speech and port it is grandly monarchical. Though it should reign supreme but for a moment, for that moment it is a sceptered sovereign. But in the flash of its momentary supremacy it should not act the tyrant. Let not the royal thinker put out the eyes of the little literary princelings who may one day be competitors for his throne. An upstart thinker sometimes plays fantastic literary tricks that make sober common sense weep.

There is moral purity in thought. Men have often wondered why the poetic thought of every age is so impure. Poetry is the vernacular of the soul in a state of spiritual elation. Sensuous poetry is the language of the soul aflame with lustful passion. The "fine frenzy" into which the fiery poet so ruthlessly plunges is an atmosphere of wildest freedom and illimitable impunity. If there is a taint of impurity in the eaglet's eye, he shows it when he looks at the sun. If there is an ugly spot, one feather of off-color, in the wing of the flyer, it appears when he spreads his pinions in the empyrean of fancy. The poet, of all men, should be "pure of heart" if he would see the true, the beautiful, and the good. Some one has warned us "to look out, when God sends a thinker on this planet"; the warning is well spoken, if that thinker be an impure poet. Impure poetry is the phosphorus that plays above the decay of a putrid society. It is the "abomination of desolation" standing in the holy place of God-like fancy, presaging the destruction of religion and the ruin and downfall of the temple of faith. To her lascivious poets of the last century France owes her infidelity of to-day. We should never surrender our thoughts to the keeping of the unclean. An author who takes his reader into his confidence and whispers into his ear an indelicate word, a word that if overheard would cause modesty to blush, is a wretch and a villain. We may not go in thought where to be corporeally would be contamination. A man generally rises or sinks to the level of his thoughts. Blasted reputations are the closing chapters of downward-thought lives. From what has been said, we are warranted in asserting that thought is a thing of conscience, and has ethics and a civilization peculiarly its own.

D. S. PHELAN.

AN AMERICAN WILD FLOWER.

IN a sequestered corner of the rockery whose trickling fountain feeds this careless little English garden, a cluster of scarlet New England columbine grows lustily from a dry nook of scanty black soil. They are aliens here, those wild American woodland bells, with their graceful hanging blossoms and their native beauty of untampered form; for they are by birth citizens of the State of New York, and they waved originally on a solitary granite rock among the Thousand Islands, not far from the exquisite reaches and dotted rustic villas of Alexandria Bay. The islet from which I gathered that knotted root, as one trophy of a delightful botanizing campaign in lands beyond the sea, was but a mere boss of rounded rock, worn smooth by grooving glaciers of the great ice age, and thinly covered by a shallow sheet of rich vegetable mold; but on its top sprang many treasures which, beautiful in themselves, have for the European naturalist all the added charm of novelty and surprise. A red cedar or two overhung the water's edge with feathery branches dipping low to the level of the stream; a thicket of huckleberries spread beneath the shadow of green Canadian spruces; and innumerable spring flowers blossomed underfoot in all the wild profusion of American spring-tide. There were blood-roots, with their waxen, creamy blossoms and their thick bleeding stocks; there were May-apples, with their green Japanese parasols cleft in the stalk to find space for the dainty snow-white bloom; there were great three-leaved trilliums, red and pale; there were cup-shaped hepaticas, and adder's-tongue lilies, and stars of Bethlehem, and yellow violets, and creeping winter-green; and in the moldering bole of one decayed pine-stump there was this identical clump of ragged orange and scarlet columbines. A trowel soon transferred them, mold and all, to an Indian parti-colored woven basket; and after undergoing many changes and reverses

by sea and land, here they are at last, flowering as bravely on this wee strip of Kentish hill-side as ever they flowered in their native soil behind the endless blue mazes of the broad St. Lawrence.

Even if I did not prize those red columbines as the living souvenir of a charming tour among the loveliest tangled water-scenery of the whole world, I should prize them for their own sake as beautiful natural blossoms of singular gracefulness and unrivaled delicacy. All the columbines are pretty enough after their kind—have they not even given their name to that incarnation of airiness, the flitting fairy of our old-world pantomime?—but there is not one among them so absolutely dainty and pensile, so perfect an embodiment of the generic ideal, as this red New England and Canadian form. The European columbines of Alpine meadows are meritorious flowers in their own way, but they are heavy, clumsy, overgrown things beside these truly wild woodland blossoms. Ours have a half cultivated, sophisticated look, while the American type has a through-going wildness and freshness of aspect which is wholly wanting to the European form. It is often so, when one contrasts allied plants of the two continents: the older hemisphere has had its whole flora degraded by the excessive prevalence of meadows, pastures, and corn-fields; the blossoms of the newer hemisphere breathe rather the native beauty of open prairie or of primeval forest. In England, we go to look for flowers in the fields; in America, you go to look for them in the woods; and that one prime difference of habit implies a thousand pretty minor differences of form and aspect.

Each separate bell of the scarlet columbine is well worth minute examination in detail; for there are few flowers which have undergone such profound modification as this in adaptation to the fertilizing visits of insects. If one looks closely into the structure of the blossom, one can see that it consists of four distinct parts or whorls, three of which contain five members each. The outer whorl or calyx answers to the green cup which incloses the flower-bud in most ordinary blossoms; but in the scarlet columbine it is colored bright red like the rest of the bell. Clearly, for some good reason of its own, the columbine has chosen to withdraw the calyx in part from its usual protective function, and to devote it instead to supplementing the attractive display undertaken as a rule by the petals alone. Each separate leaflet of the calyx, however, is flat in outline, and does not differ

conspicuously in shape from the calyx-pieces of other flowers. But it is quite otherwise with the petals. These, as everybody has often noticed, are not simply shell-shaped or saucer-shaped, like those of a rose or a buttercup, but are prolonged into deep tubular spurs, each protruding between and behind the nearest calyx-pieces, so as to give the entire flower its peculiar horned appearance. In fact, if you pull out a single petal of the columbine, it looks for all the world like the cornucopia of old-fashioned symbolical sculpture, with a wide-open mouth and a small, narrow, tapering bottom. The explanation of these curious petals really sums up the whole past evolutionary history of the flower. Inside the petals, again, come the numerous stamens, the organs which produce the golden fertilizing pollen; and finally, inside the stamens, comes a single row of five carpels or unripe seed-capsules. So much of structural detail is absolutely necessary before we can begin to unravel the strange story of the columbine's past transformations.

And now, where did the scarlet columbine come from, and by what steps has it reached its present condition? Well, by origin and family it is a common meadow buttercup; and though it is one of the most advanced and most highly differentiated of the buttercup group, it still retains many unmistakable signs and relics of its half-forgotten lowly ancestry. The buttercups, of course, are among the very simplest existing types of flowering plants; you can see as much at a single glance into the center of their brilliant, golden saucers. Just pick one for comparison with the scarlet columbine, and note carefully the little points of agreement and of difference. An ordinary yellow field buttercup out of any meadow around you will do, for they are as plentiful in America as in England; not native-born Americans, it is true, but naturalized citizens of the United States, having followed the footsteps of the white man, with the clover-seed and the wheat, over the whole face of the civilized globe. In fact, a very large proportion of the American meadow and wheat-field weeds, like the plantain and the chick-weed, are European plants by origin; and that accounts for the broad distinction which exists in America for the popular mind between weeds and wild flowers. In England, such a distinction is hardly felt at all; every one of our native plants is a member of the self-same scrubby north European flora, with its much-degraded over-civilized types. But in the States, you can discriminate at once between the shabby

straggling weeds of cultivation, introduced into fields or gardens with English grasses or cereals, and the true native woodland wild-flowers, that grow now as they grew a thousand years ago beneath the shade of green American pines and maples. The buttercup belongs to the first or imported class; the columbine falls rather under the second or thoroughly indigenous division. Did not even the red Indian of early colonial days note the difference, and pathetically describe our English ribwort as the white man's footstep, because it seemed to spring of itself wherever the sole of the intrusive pale-face had once been planted?

Our meadow buttercups, then, are very simple, central or typical flowers, hardly altered in any way from an extremely primitive ancestral form. They have each five little sepals or calyx-pieces, inclosing five bright golden petals, both of the most ordinary or unspecialized shape. Within these they have a mass of yellow stamens, and in the very center a whole scattered group of separate small carpels or unripe fruits. There is nothing that marks a primitive flower more than this separateness and distinctness of the carpels. You find it in every very early type; for example, in the water-plantains among the monocotyledonous plants, and in the potentillas and buttercups among the dicotyledonous plants. Moreover, in all such very ancient types, the carpels are also extremely numerous. On the other hand, as soon as plants begin to advance in organization, we can always observe that the carpels become fewer in number; because higher types acquire surer means of fertilizing their seeds, and are thus enabled to dispense with some of the supernumerary capsules. Again, the simplest plants have always only one seed in each carpel; and therefore it is necessary that a separate act of fertilization should take place for each seed. In the buttercup, for example, the bee must deposit a few grains of pollen on the sensitive surface of every separate carpel, out of the twenty-five or thirty of which the compound fruit is composed; and if he misses any one carpel, that particular little capsule never sets its seed at all. This is a clumsy and expensive mode of getting fertilized, and higher plants have devised a better plan for avoiding the difficulty; they produce fewer carpels, but put more ovules into each of them, so that one act of fertilization suffices for a whole batch of embryo seeds at once. Moreover, in most higher types the carpels are not distinct from one another, but are welded together into one head, as in the poppy, where the cells of the

fruit represent so many originally separate individual capsules. The immensely increased security for fertilization thus effected naturally gives the plant a great advantage in the struggle for existence; and we find accordingly that most modern flowers have their carpels so welded together into a single compound pistil. Only a few early types here and there now survive to keep up the memory of the older separate condition.

But why does the bee visit the buttercup at all? Of course, for the sake of the honey. If you pull out one of the golden petals from the flower, you will see that on the claw or base, near where it joins the stem, there is a little hollow dark-colored spot on its upper surface, covered by a tiny convex scale. You will not need a magnifying glass to see the spot or the scale; they are quite clearly visible to the naked eye. If your buttercup is a fresh one, which has not already been rifled by some adventurous bumble-bee, you can see a tiny drop of liquid oozing from the spot on lifting up the scale with the point of a needle. Put your tongue to the gland, and you will find the liquid it distills is honey. The little thickened spot on the petal is the buttercup's nectary; and the convex scale on top of it is put there to protect the honey from small unauthorized insect thieves, which might otherwise steal it without benefiting the plant in any way. With the bee, or any other recognized fertilizer, the case is different. For the pollen-sacks of the buttercup ripen before the sensitive surfaces of the carpels are mature, beginning from the outside inward, and each stamen as it ripens turns toward the nectary and away from the center of the blossom where the carpels are situated. As soon as the pollen-sacks have all shed their golden dust, the carpels in turn begin to mature for impregnation, and their sensitive surfaces grow viscid, so as to receive the pollen-grains from some other flower. Now, when a bee alights upon a buttercup head, he generally poises himself on the carpels in the center, and proceeds systematically to search the five nectaries, one at the base of each petal, for their store of honey. If the blossom is in its first or pollen-shedding stage, he merely dusts over his hairy breast and legs with the fertilizing grains, which he carries off to the next flower he visits. But when he comes to one which is in its second stage, with the carpels mature, he unintentionally rubs off the pollen from his body on to the sensitive surfaces, which are now covered with a sticky secretion, in order to retain it. As he has to turn once right round on his

own axis (so to speak), in rifling the five nectaries, one after another, he is pretty sure to impregnate every one of the numerous carpels in the course of his slow rotation. That, indeed, is the sole object of the entire mechanism: the drops of honey are there to allure him; the bright petals are there to advertise its presence; the pollen is there to fecundate the young seeds; and the carpels themselves are there in order to be duly impregnated by the fertilizing dust.

But why does not the pollen simply drop from the stamens on to the carpels? Why all this interaction of bee and honey and bright color, merely to secure an end which might seemingly be just as well compassed by so easy a plan as that of trusting to unconscious gravitation? Because the object nature has in view is not fertilization alone, but cross-fertilization. Breeding in and in, close intermarriage, or whatever else we choose to call it, always ends in the long run in infertility; a little infusion of fresh blood, the introduction of a new strain, always produces stronger and healthier offspring. Hence, all the best and most advanced plants are provided with elaborate devices for getting the pollen of one flower carried by insects, birds, or wind to the carpels of another; and the greater number of kinds really differ from one another mainly in the methods by which they secure this primordial necessity of their constitution.

Look away now from the buttercup to the scarlet columbine, and let us try to see what are the points of superiority which have made the more developed flower rise from the condition of the lower one; and first, let us examine the petals, which strike the keynote of all the other changes. These petals, as we have seen already, are produced behind into long spurs, which end in a blunt knob or pocket. No country child on a New England farm needs to be told that those knobs contain a drop of pure, luscious honey; we have all bitten them off over and over again when we were children, for the sake of their sweet contents, just as we have all sucked the nectar of clover and honeysuckle, or as we have all stolen the store of sugary juice from the crimson recesses of the Carolinian trumpet-creeper. Now, at first sight, it is hard to see how these funnel-shaped petals of the columbine—little blind alleys leading at last into a *cul-de-sac* of distilled honey—can ever have been developed from the saucer-like petals of the buttercup. But if we bear in mind the peculiar position of the nectary on the buttercup petal, it is not so difficult to

understand the transformation as it would appear to be on the first blush of the thing. Suppose, for a moment, you were still further to depress the little hollow under the scale of the buttercup, what would you get? Why, the faint beginning of such a tube as that of the columbine. And suppose you were to go on indefinitely with the same process, what would you get? Why, the columbine petal itself.

That, indeed, is clearly the right way to look at it. The petal of the columbine is just the petal of the buttercup, with the tiny depression or hollow of the nectary prolonged backward into a tubular spur. And how or why did this prolongation come about? Well, we must remember that though most buttercups have got the nectary covered by a scale, they have not all got it so; and what is very significant, the scaleless kinds are among the most primitive in type of the whole family. Hence, we may fairly conclude that the very earliest buttercups of all had only a naked nectary on each petal, as is still the case in the common water-crowfoot, which brightens many still ponds or shallow ditches throughout the States with its pretty faded yellow or whitish blossoms. But there are two conceivable ways in which such plants might guard their honey from the depredations of thieving small insects, who steal the nectar without fertilizing the embryo seeds. One way would be by developing a lid or cover, like the scale of the meadow buttercup; the other way would be by hiding it at the bottom of a long spur or tube, not too deep to be probed by the big proboscis of a bee or a butterfly, but quite beyond reach of tiny, useless midges or pickpocket flies. Whatever plants happened to vary in either of these two directions would more often be properly fertilized than any others; and so the tendency, once set up, would be sure to be increased by natural selection; and that such tendencies would be set up we know to a certainty, both *a priori*, because all plants and animals are always spontaneously varying in all conceivable directions, and *a posteriori*, because here are the buttercups and the columbines themselves to answer for it that they did.

The buttercups have solved the problem how to secure their honey from plunderers in the first of these two ways; but a great many of their relations, common descendants of the same primitive ancestor, have solved it in the second. They have utilized the whole petal as a sort of long sack to contain honey. We see the first indication of such a habit in the group known as

hellebores, which have the petals curled round into a comparatively short tube, full of honey. In the scarlet columbine, the tube is much longer and rather bent, so as to keep out small insects; while in the wild English columbine it is far more curved, in accordance with several other marks of higher development. In the larkspur, which is also a very advanced form of buttercup, there are only two petals, the other three having disappeared by disuse; and these two are prolonged as honey-jugs under shelter of a covering and protecting spur formed by one sepal of the calyx. And in the blue monk's-hood or aconite there are also, as a rule, only two petals, though rudiments of the other three still occur in some kinds; and these two remaining petals are similarly made to do duty as nectaries, being concealed under the large blue sepal which forms the hood or cowl whence the flower takes its appropriate and significant English name. In all these cases, then, the petals are really highly developed forms of the buttercup petal, with the nectary much more pronounced and greatly specialized for its acquired or remodeled function.

Notice, too, that the color of the flower varies generally with the point it has reached in the ascending scale of development. The buttercup is golden-yellow, and so are almost all other very simple and primitive blossoms. But it has been shown that as flowers become more complex they tend to pass through a certain regular gradation of tints: from yellow, the common starting-point, they go upward through white to pink, red, purple, and finally blue. Now this gradation is beautifully illustrated in the buttercup family, and very particularly so in the scarlet columbine. For while the common buttercups are all yellow, many of the higher Alpine species are pure snowy white; and so also is that pretty Tyrolese hellebore cultivated, both in English and American gardens, under the name of Christmas rose. The scarlet columbine, again, which stands higher in the scale is red, but not wholly so. If you look carefully at the petals, you will see that the lower and broader portion, which most closely represents the original buttercup petal, is often still bright yellow; it is only the more highly developed part, the long tube which represents the greatly elongated nectary, that has assumed a deep glow of brilliant scarlet. In fact, the color passes slowly, as the funnel narrows, from yellow to orange and from that again to blushing red. The buds, too, are yellower

than the open blossoms, which clearly suggests to one which is in reality the original and which the acquired color. The English columbine, which is a more developed type, is never yellow in the wild state, but often purple, and sometimes blue. Larkspur, once more, ranking still higher in the floral scale, in virtue of its singular bilateral blossoms, is usually blue, though it sometimes reverts to reddish-purple or white; while monk's-hood, the very top of the tree on this line of development, is usually deep ultramarine, only a few species being prettily variegated with pale blue and white. As a rule, blue flowers are the very highest; and the reason seems to lie in the strange fact, first discovered by Sir John Lubbock, that bees are fonder of blue than of any other color. Still, they are fond enough even of red; and one may be sure that the change from yellow to scarlet in the petals of the American columbine is due in one way or another to the selective tastes and preferences of the higher insects.

The remaining points of variation in the columbine are all dependent ultimately on this prime variation in the shape and construction of the tubular petals. By thus storing all its honey in a deep vase, like the stork in the fable, the columbine keeps away all useless depredators, and, therefore, all the more encourages the visits of legitimate insects—guests with a long proboscis, such as bees and butterflies. But, in order to do so, it must attract them by its color; and as the petals alone are now hardly sufficient for this task, it has acquired a bright pigment in its calyx as well. The American scarlet columbine, a comparatively undeveloped species, has the calyx still rather greenish, though tinged with the same crimson as the spur; in the English columbine and most other highly developed types, the calyx is larger and more expanded, it has lost all trace of greenness, it is colored blue or purple, and it serves almost entirely for display, the petals doing duty as honey-glands only. Indeed, as a general rule, one may say that, where the calyx is much exposed to view, it tends to become as brightly colored as the petals, and often supersedes them altogether. In the buttercups, the petals alone are bright golden; in the globe-flower, the large sepals cover and almost conceal the small petals, and they are therefore just as brilliant a yellow as the petals of the buttercup; in the marsh-marigold, as common a plant by the water-side in America as in Europe, the useless petals have been suppressed, and the sepals alone do duty as insect attractors. All these flowers are bright

yellow. It is just the same, however, with the scarlet, or white, or purple anemones, which have similarly got rid of the functionless petals. In the columbine, the petals and sepals are both colored, and both serve to heighten the effective display. In the hellebores, the petals are almost unseen, being hidden within the converging cup-shaped calyx; and in larkspur and monk's-hood they are quite concealed by the spur or hood which has usurped their original function. But in all these last cases, the petals still survive, though often in reduced numbers, because they are useful to the plant in a new capacity—no longer as advertisements, but as storers of honey.

At the same time that the sepals and petals have undergone these curious transformations the carpels also have been reduced in number to a single whorl of five. The bee, alighting now on the center of the blossom, is able readily to fertilize these five, as he turns about from one to another of the five long tubes and thrusts his flexible tongue into their deep recesses. Moreover, each carpel, instead of containing only one seed, now contains a whole row, a change which was already begun in the marsh-marigold and the globe-flower, and which is also found in the hellebores. These, however, had each many carpels, like the buttercup, while the more advanced columbines have been able to bring down the number to five. Finally, in the extremely developed monk's-hood, by a more advanced economy, the carpels have been further reduced to three, while in the larkspur there is only one. To the last, however, there is no union between the separate carpels, as in the poppy; and it is that peculiarity which enables us to trace so confidently the origin of all these highly evolved types directly from the very simple and primitive buttercups. Many other things might one find to say about the scarlet columbine; but life is short, and science is long, even longer than art; so perhaps this is as much as a busy world has time to hear in one day about a single woodland American flower.

GRANT ALLEN.

NORTH AMERICAN REVIEW.

No. CCCXXIII.

OCTOBER, 1883.

GOLD AND SILVER AS STANDARDS OF VALUE.

IN the contest, which has been waged for a number of years, between the advocates of mono-metallism and bi-metallism, it has become apparent that the majority of the people of this country desire that silver, as well as gold, should be coined, at least to the limited extent provided for by the act of 1878. They desire it, not for the purpose of inflating the currency, nor for the purpose of benefiting certain sections of the country in which silver mining constitutes an important and profitable industry, as has been so often derisively charged by the mono-metallists, but for the broader and more equitable purpose of preserving uniformity in the value of metallic money, and more especially to prevent such a contraction of the total volume of money as would fatally depress prices, pervert the equity of contracts, ruin debtors and tax-payers, aggrandize moneyed capital, and impoverish the masses of the people.

Justice to all classes of people—to the poor and the rich, to the laborer and the capitalist, to the debtor and the creditor—requires that we should so legislate as to preserve for money, as nearly as possible, a uniform value, or, in other words, a steady purchasing power. The money which the borrower should pay the lender, at the maturity of the debt, should be of the same value as that which was received when the debt was made.

Since the passage of the act of 1878, by the coinage of silver, the United States have added about \$150,000,000 to the metallic money of the country. That it has not thereby created an inflation of the currency, and that that none is threatened, but that the volume of money is too small rather than too large, is shown by a tendency to falling prices.

The address of Mr. Goschen, April 8, 1883, before the London Institute of Bankers, upon the increase of the purchasing power of gold, or, in other words, upon the fall in the gold price of commodities, within ten years, has excited lively discussion in Europe and in this country. The criticisms upon his address have been varied and numerous; but none of his critics have denied his proposition that prices have fallen, or that Mr. Goschen is right in assigning, as one of the conspicuous causes of the fall, the increased demand for gold arising from the demonetization of silver by several countries. They have not, so far as I have observed, gone beyond the attempt to show that Mr. Goschen has somewhat overstated the new demand for gold, and that the other causes for a fall in prices are more numerous than he supposed them to be.

The London "Times," which, upon the whole, does not regard the fall of prices as a thing to be deprecated, or as affording an occasion for measures to relieve the constriction of gold, says in its issue of May 7, 1883:

"Prices at the present day are, on the whole, lower than they were ten years ago. They are as low, or nearly as low, as they were in the old days before the great gold discoveries had been made. . . . It is certain, as Mr. Goschen says, that prices of commodities are affected by changes in the volume of the circulating medium in which they are expressed. . . . Germany, Italy, and the United States have, during the past ten years, been absorbing in their currency more gold than the available supply. They have taken between them not less £200,000,000, and a large part of this has necessarily been obtained at the expense of the general stock. The result has been that, as the stock of gold has diminished, the price of gold has gone up; or, in other words, that the prices of commodities have fallen. It is impossible that so large a drain of gold can have failed to affect prices. Mr. Goschen must be admitted to have made out his case thus far. He has laid his finger on a cause, and it is demonstrably a *vera causa*, capable of the effect he assigns to it. But an examination of his figures will show that other causes have been concurrently at work."

It is difficult to compute the exact rise and fall of the general range of the prices of commodities, and persons desirous of ascer-

taining the truth may differ somewhat in the results at which they arrive. The method lately adopted by esteemed English authorities, as affording the closest approximation to accuracy, is that of comparing the prices in different years of all the articles imported into and exported from Great Britain, in respect to which the Custom-house statements admit of tracing the relation between quantity and money valuation. This is true of about three-fourths of the whole mass of imports and exports. Considering the immense magnitude of British foreign commerce, and that it embraces almost everything that is bought and sold by mankind, either for consumption or as raw materials for manufactures, it would seem that the prices of commodities could not be more reliably ascertained.

Robert Giffen, Secretary of the British Board of Trade, in a paper read March 21, 1882, before the London Statistical Society, said in respect to the fall of prices in Great Britain during six years ending with 1879: "The range of difference in the aggregate values of the exports of the United Kingdom, owing to the difference of price alone, amounted to thirty per cent. between 1873 and 1879."

The determination of the German Government to adopt a single gold standard was announced by decrees in December, 1871, but during 1872 nothing was done beyond coining about \$100,000,000. It was in 1873 that the demonetization of silver, the melting of silver coins, and the sale of bullion, by the German Government, actually began. The six following years were marked by a continuous and extraordinary fall in prices and depression of industry throughout the whole commercial world. There may have been other and contributory causes for this fall and depression; but it cannot be successfully controverted, and I believe it has never been denied by financial writers upon the subject, that among the principal causes was the silver demonetization of Germany, followed by a similar policy in Denmark, Sweden, Norway, and the United States.

Since 1877 the London "Economist" has made semi-annual and annual comparisons of the prices of imported and exported articles. In its issue of January 27, 1883, it exhibits the prices for each of the five calendar years ending with 1882. The starting point of its comparison is \$1,422,200,000 of imports and \$714,550,000 of exports in 1877. It then proceeds to show the changes in the aggregate money valuation of the same articles in each of

the next five years, as compared with the immediately preceding year, which resulted from changes in price, and excluding the effect of changes in quantity.

From the figures of the "Economist" it appears that there was in 1880 an increase of \$105,450,000; but in each of the other four years a decrease as follows:

<i>Years.</i>	<i>Decrease of Prices.</i>	<i>Years.</i>	<i>Decrease of Prices.</i>
1878.....	\$138,250,000	1881.....	\$48,800,000
1879.....	113,300,000	1882.....	30,650,000

The comparisons of the "Economist" which cover articles dealt in by the British foreign trade, of the enormous value of \$2,137,750,000 in 1877, are the best attainable evidence of the fluctuation of prices throughout the commercial world. The year 1877 was itself the fourth year of a period of falling prices which commenced in 1873, the date of the German demonetization of silver.

When the agitation for a single metallic standard was commenced by Chevalier and others in 1855-6, immediately after the great out-turn of gold by California and Australia, the sole ground upon which it was based was the danger, if the world continued to use both the metals as money, of a depreciation of the money standard and of a hurtful inflation of prices; but now, in the presence of a large and continuing fall in prices, it has become apparent that the use of both the metals will be required, and may not even be adequate to prevent a monetary constriction, which will lower the value of all forms of property.

The New York "Public," although it ably and persistently advocates the discarding of the use of silver money, is forced to admit that gold is growing dearer and the gold price of merchandise lower. I quote from its issue of March 23, 1883:

"The year 1882 was one of remarkably general and important decline in prices, both in this country, in Great Britain, and on the Continent. Generally speaking, the purchasing power of gold was decidedly increased during the year 1882 throughout the western world."

The rise of prices, commencing in this country in 1879 and a little later in Europe, proved to be only a temporary reaction, such as will occur in any general course of the markets, whether up or down. It was assisted undoubtedly by the resumption of

silver coinage in this country, under the act of 1878, notwithstanding the hostile, halting, and partial administration of that law.

The writer of the article in the London "Times," already quoted from, endeavors to allay the fears of mankind, as to a further rise in gold, by making the following observations :

"Mr. Goschen's calculations do not help us to forecast the purchasing power of gold. The drain of gold has been temporary. The supply goes on, and apart from the exceptional demand of the last ten years, it is in excess of the world's wants. How, then, will the case stand when the world at large has recouped itself for its late losses? The tendency of things seems to point to a lower value of gold, unless, indeed, some other nations are to be found to do what Germany, Italy, and the United States have been doing, and to absorb, or more than absorb, the whole future yield. If nothing of that kind happens, we may look for a return to higher money prices. It is more certain that the supply of gold will continue than that the demand will rise in proportion. Again, a rise in the value of gold serves as a stimulus to the production of gold."

It is quite impossible to mistake the animus of the organ of British opinion when it makes so many gratuitous assumptions and overlooks so many obvious facts. There is no ground for the affirmation that the out-turn of the gold mines during the last decade would have been in "excess of the world's wants," or, in other words, would have done anything more than keep prices steady, if silver had not been demonetized in Germany and the United States.

It is true that "a rise in the value of gold serves as a stimulus" to mining for it; but it is also true that the production cannot be enlarged at will, as can be the production of wheat or cotton, but is limited by such fortuitous circumstances as the discovery of mines; and, in point of fact, its actual production has been declining during the last ten years, while its value has been rising.

That the fall in prices, during the last ten years, may be accounted for in part by the demonetization of silver does not admit of a doubt, but there are other conspicuous causes for the fall which have been generally overlooked by writers upon this subject. I refer to the large increase in the consumption of gold in the arts and manufactures and to the decrease in the production of the mines.

Soetbeer, who has been the principal writer and statistician

of the supporters of the gold mono-metallic policy of Germany, printed two exhaustive essays in 1881, the first upon the world's production of gold during the fifty years ending with 1880, and the second upon the consumption of that metal in the arts during the same time in Europe, America, and Australia, and exclusive of Asia and Africa. No living statistician enjoys a higher reputation for industry and care, and of course he cannot be suspected of a desire to underrate the annual supply of gold for monetary purposes, which is the excess of its production above its consumption in the arts. He gives the following table :

<i>Decade ending with</i>	<i>Gold produced in the world.</i>	<i>Gold consumption in the arts in Europe, America, and Australia, exclusive of old materials used.</i>
1840	\$134,915,830	\$119,629,100
1850	364,206,280	132,922,000
1860	1,341,182,290	186,090,800
1870	1,252,789,850	382,150,750
1880	1,131,830,830	556,092,070

During the decade ending with 1880 the average annual consumption of gold was \$55,609,207, but inasmuch as there has been a constant and large increase of consumption, in recent years, the actual consumption must have been much greater at the end than at the beginning of the decade. We may fairly estimate that \$55,609,207 was the consumption of the middle year of the decade, and that the increase during the eight years that have since elapsed has been \$13,915,304. This is, of course, assuming that the annual increase of \$1,739,413, which is shown by comparing the decade ending with 1880 with the decade ending with 1870, has continued through the past eight years. There are many facts going to show that the increase for the past eight years has been more rapid.

If the figures of Soetbeer are correct, and they are generally admitted by statisticians on this subject to closely approximate correctness, the annual consumption of gold in the arts in Europe, America, and Australia is at the rate of \$69,524,511. In reaching these figures Soetbeer has made an allowance of from ten to twenty-five per cent. in the different countries, for gold obtained from old articles of ornamentation, which have been remanufactured.

In no country has the effort to ascertain the consumption of the precious metals in the arts, by government authority, been

more thorough than in the United States. It was undertaken here for the first time by Mr. Burchard, Director of the United States Mint, and has been executed with creditable industry, care, and skill. In addition to obtaining from the assay offices the delivery of gold to jewelers, he has received replies to thousands of letters addressed to persons engaged in all the arts in which the precious metals are used. His conclusion, as given in his last annual report, is that the gross consumption of gold in the United States during the fiscal year ending June 30, 1882, exceeded \$12,000,000. He says the statistics do not justify a larger deduction than ten per cent. for old jewelry and plate, in arriving at the net consumption of gold in the arts in that year, which therefore exceeded \$10,800,000 of new gold. This is \$1,827,765 more than the average annual net consumption of this country during the decade ending with 1880, as given in Soetbeer's tables.

The Director of our Mint, in his annual report for November, 1881, says: "From a review of the information published in this and preceding reports and other authorities, I estimate that, including the annual consumption in the United States of \$11,000,000 of gold and \$6,000,000 of silver, the annual consumption of the world in ornamentation, manufactures, and the arts is at least \$75,000,000 of gold and \$35,000,000 of silver."

To the consumption of gold in the arts in Europe, America, and Australia is to be added the steady importation of that metal by British India, where it is not used as money, but is worked into ornaments by the native artisans. It is so common to speak of that country as an absorbent of silver, that we have overlooked the fact that it is also a large absorbent of gold. The official figures of its foreign trade show that, during the thirty years ending with 1880, the average annual excess of Indian imports of gold over exports was \$16,018,330.

The importation of gold by India continues unabated, and may be expected to increase with the rapidly advancing wealth of that country. But taking it at the average rate for thirty years, we have the following results:

Annual gold consumption in Europe, Australia, and America.	\$69,524,511
In India.....	16,018,330
Total.....	\$85,542,841

The average annual gold production of the world, during the decade ending with 1880, was, according to Soetbeer's table, \$113,183,083; but, as it was at a declining rate, it was less in 1880. Soetbeer estimated it for that year at \$101,000,000, and Sir Hector Hay at \$95,000,000. The estimates of Mr. Burchard, Director of the United States Mint, are higher, being, for three calendar years, as follows:

1879	\$108,778,807
1880	106,436,786
1881	107,773,157

Wells, Fargo and Company estimate the production of the United States in 1882 at \$2,768,682 less than Mr. Burchard. The New York "Mining Record" insists that the world's production of gold in 1882 did not exceed \$90,000,000, the difference between the "Record" and other authorities being most marked in respect to the yield of the Russian mines. Without claiming exact correctness, the total gold yield of the world may be approximately stated at \$100,000,000. Of this total production of gold, the arts and manufactures swallow up fully five-sixths, and this consumption, being almost wholly for objects of luxury and display, must increase in about the ratio in which wealth increases.

The consumption of gold for other than monetary purposes in Europe, America, and Australia has more than quadrupled in thirty years, and has quite trebled in twenty years. It is more than five times what it was half a century ago. The great mass of gold which has flowed from the mines has been absorbed in the same opulence and luxury of the times which have swallowed up the flood of gems, great in volume beyond any former precedent, from the diamond fields of South Africa, and increasing prices will be quite as likely to whet the appetite for both as to check it. Five-sixths of the current production of gold is absorbed in the arts and manufactures, in the western world and in British India. A part of the remaining sixth is lost in the wear of coins and by fires, shipwrecks, and forgotten hoards. What is left to increase the stock of gold money in proportion to the increase of population, exchanges, and wealth of the world? It is possible that the production of gold may increase. It is also possible that it may decrease, as it actually has been decreasing for many years; but there is no uncertainty about the consumption of gold, which is sure to grow *pari passu* with the growing

opulence and luxury of the world. It has trebled within the past twenty years, and if it only doubles within the next twenty years it will exceed the production, even at the extreme rate which it attained when the California and Australia out-turn was at its highest point.

All the conditions have changed since the commencement of the agitation for a single metallic standard. There was then a greater production of gold, and a very much less consumption for other than monetary purposes, and it is not strange that many persons honestly believed that the steadiness of prices could be best secured by confining the functions of money to gold alone. But it is difficult to understand how it can now be believed, under the complete change of circumstances, that a perseverance in that policy can have any other result than a prostration in the prices of every species of property and in the wages of labor, and the serious injury of all indebted persons, classes, and nations. Although the disasters which are sure to follow from this policy will fall most heavily upon the debtor classes, and creditors and money capitalists may derive a temporary advantage, they cannot in the end escape a participation in the evil results. In a general wreck all must suffer, although in different degrees.

The conditions, it must be admitted, are modified where creditors and debtors do not live in the same country. The London "Economist" of April 21, 1883, closes its comments upon Mr. Goschen's address by saying:

"There is some consolation to us in the fact to which he directs special attention: that any increase in the purchasing power of gold is a benefit to creditors. Nearly every nation on the face of the earth is indebted to us, and the result of an appreciation of gold is, that we obtain a larger quantity of their commodities in settlement of our claims."

This view of the "Economist" is one of the explanations of the support given to gold mono-metallism by classes which are powerful and, perhaps, dominant in some other countries of western Europe besides Great Britain. It shows how idle the suggestion is, that we can force the English and similarly situated nations into bi-metallism by again demonetizing silver ourselves, and thereby precipitating a still further decline in prices. Such a decline is precisely the object which, as international creditors, they desire. We know by an experience too fresh to

be forgotten, that when the depression of 1878-9 was at its worst, the adherence of the governing classes in England and Germany to a gold standard only became more determined and aggressive.

It is not by coöperating with them, but by resisting and defeating their scheme of dislodging silver from its immemorial place as one of the money metals of the world that we shall compel them to abandon it. The present and prospective position of the United States is so strong, and silver is now the favorite currency of so large a part of mankind, that gold cannot be made the exclusive money of the world without our consent. In 1900, we shall have more population and more wealth than Great Britain and Germany combined. We have only to remain firm in our present position. Europeans are too dependent upon foreign trade, and have too much fear of the United States, as a commercial rival, to persevere in a gold policy which would tend to isolate them if we refused to join them in it. We cannot bring upon them the coercive power of low prices without submitting ourselves to the same prices and to all the ruinous consequences which they entail. The success of that species of coercion is, to say the least, too doubtful to justify the enormous sacrifices on our own part which a trial of it must involve.

N. P. HILL.

SOME ASPECTS OF DEMOCRACY IN ENGLAND.

First. To democracy in England may be applied a celebrated phrase, in a sense different from that in which it was used by its author. The English democracy "reigns but does not govern."

Under the constitution of modern England the people are sovereign, for any change which a decided majority of the nation had at heart would be rapidly effected, and effected by legal means. Convince, say, two-thirds of the people that the State Church, the House of Lords, or the Crown, ought to be abolished, and the ecclesiastical system, the peerage, the monarchy itself, would be put an end to by the same legal and regular means as the process which brought about the disestablishment of the Irish Church. That the will of the people could, even in such extreme cases as those I have imagined, be carried into effect by legal means and without revolutionary violence is, if not absolutely certain, yet in the very highest degree probable. What no sane man can doubt is that in the long run the course of domestic and of foreign policy, the fate of every political party, the success or failure of every leading statesman, depends upon the predominant wish of the people, whenever such predominant wish in reality exists. The utter absence in England of popular violence is in fact a tribute to popular power. Crowds do not fight in the streets for objects they can obtain by casting votes into the ballot-boxes, and an even stronger proof of popular supremacy than the orderliness of the multitude is found in the spirit of compliance with public opinion displayed by politicians of every political hue. The contest which ended with the first Reform Bill determined, once for all, that the staunchest Tories were not prepared to attempt a policy of reaction; the history of the last twenty years proves that modern Conservatives dare not pursue a policy of re-

sistance. There is no reason to suppose that the statesmen of to-day are men of less courage or of lower tone than their fathers. The difference is that modern politicians tacitly recognize the advent to power of a new sovereign. They yield, as politicians of all ages have yielded, to the will of the person, or persons, who can be felt to represent the force of the nation. The difference between the statesmen of 1783 and the statesmen of 1883 is that North, Fox, or Pitt, and hundreds of men inferior to them, saw in the Crown, in Parliament, and in the limited bodies whom Parliament represented, the supreme power which ruled, and had a right to rule, the country. Gladstone, Lord Hartington, and Lord Salisbury recognize, with more or less distinctness, that the majority of the electors are the true masters of England. The sovereignty of the people, if a doctrine still denied in theory, has become in practice a fundamental dogma of English constitutionalism. A minister may serve his sovereign basely. The heroes who repelled the armada played a very sorry part as courtiers and flatterers of Elizabeth. In like manner, modern statesmen are prone enough to lose all sense of dignity in flattering the sovereign people. But there is no more essential baseness in an English minister's recognizing that the people are king than there is in the deference paid by a German minister to the undoubted power of the German emperor. Statesmen in all ages must recognize their true sovereign. The whole attitude of English politicians proves that the English democracy has begun to reign, though the power of the democracy is in the nineteenth century as carefully masked under the forms of the monarchy as in the eighteenth century was the power of the aristocracy.

But the democracy which has begun to reign assuredly does not, as yet, and perhaps never will, govern. The constitution is not "democratic" in the sense in which that term is applied to the political arrangements of France, of Switzerland, or of the United States. The so-called democracy of the United Kingdom consists of less than four million electors, selected out of a population of more than thirty-five million. This limited electorate does not include the poorest classes; and the inequality of electoral districts, the distribution of parliamentary seats, the difference between the borough and the county franchise, the existence of the House of Lords, and a hundred other constitutional checks, visible and invisible, counterbalance or neutralize

the theoretical supremacy of the constituencies. If you look not at the letter but at the working of the constitution, you feel inclined to conclude that still further limitations must be placed on the sense in which English institutions can be called democratic. The well-to-do, the rich, the noble, are still, as they always have been, the governing classes in England. The cabinet contains seven peers; the commoners who have seats in it are, from the premier downward, for the most part men of wealth, and, with very few exceptions, belong to the upper portion of gentlemanlike society. Nothing is more absurd, and nothing at the same time is more instructive, than the outcry raised among Conservatives at the real or supposed influence of Mr. Chamberlain. The entrance into the cabinet of a wealthy manufacturer, and the most distinguished public man in a city like Birmingham, excites in some circles, if I may venture to judge from the tone of the Conservative prints, a good deal more horror than would be aroused in France by the nomination as premier of the reddest Republican who sits in the French Assembly. The horror is no doubt partly factitious. I have lived long enough to remember the day when Mr. Bright was denounced as a demagogue who set class against class, and was ready to advocate an agrarian law. A little knowledge of modern history makes one aware of the fact that not more than fifty years ago Lord Grey, Lord John Russell, and Lord Brougham were denounced as revolutionists, prepared to undermine the constitution.

But that people should even pretend to stand aghast at the increasing influence of "Joe" Chamberlain proves that if England has a democratic constitution it is not as yet a democratic country, and the writers or politicians who rhetorically tremble at the unaristocratic antecedents and the revolutionary schemes of Mr. Chamberlain probably know their trade. The mass of the electors like to be led by rich men and lords. There is something far more curious than admirable in the delight displayed by every section of the Liberal party at the tardy and incomplete conversion of Lord Derby to the dogmas of Liberalism. It is impossible not to conjecture that English workingmen, like other classes of their countrymen, are a good deal influenced by their trust in money and love of rank, which lies very near to the vice of snobbishness—a vice, it may be added, which, if it lowers the character of the nation, probably contributes to the

safety of the state. However this may be, what is certain is that artisans do not wish to be represented in Parliament by their fellows. Not more than three or, at most, four men who can in any sense of the term be called artisans have seats in the House of Commons; and if Mr. Bradlaugh is to be counted among the representatives of the laboring classes, he still stands for all the zeal of the Northampton shoemakers, shivering outside in the cold. This fact is instructive in more ways than one. It suggests a conclusion which is confirmed by many of the smaller and familiar traits of English life, namely, that however democratic may be some parts of the English constitution, the spirit of democracy has as yet not pervaded English society. The working classes, in the towns at least, have obtained full political rights; it is doubtful whether they themselves recognize or try to establish that ideal of social equality which exerts a profound influence on the democracy of France. Privilege and personal liberty (notions closely connected together) are the ideas which have hitherto characterized the whole development of the English people, and it is by no means certain that conceptions engendered by aristocratic government have not been inherited by the English democracy.

Second. Democracy in England is an enigma, so to speak, both to its leaders and to itself.

Modern statesmen, at any rate in England, recognize the sovereignty of the people; they honestly wish to govern in accordance with the will of their sovereign; they all avow implicit deference to public opinion. Their main difficulty is that, on many points they neither know nor even can conjecture what is the opinion of the people. What, for example, is the genuine opinion of the "nation"—by which term I mean a distinct majority among the electors—as to the questions in which politics trench on the domain of religion? The matter is one on which men of equal judgment and of equal information arrive at opposite conclusions. Listen to Mr. Bright, and you will believe that the people long for the disestablishment of the Church; read the "National Reformer," and you will infer that the working classes are zealous secularists. Churchmen, on the other hand, are convinced—and not without some apparent reasons to allege for their conviction—that the Church of England is each day obtaining increased influence; and Mr. M'Call informs the world that the only way to keep the working classes from

demanding a redistribution of property is to allow full scope to the vagaries or principles of Ritualist clergymen.

Where experts differ, a plain man who can pretend to no private or special knowledge of popular sentiment may well hesitate to pronounce any decisive opinion. The only point about which a fair critic can feel certain is that the guides or exponents of popular opinion are, for the most part, in the dark as to what that opinion may be on matters involving religious or theological considerations. What, again, is the opinion of the nation about peace and war? Lord Beaconsfield was certainly not a fool. He was free from prejudices. During a large part of his career he was quite prepared to ally himself with the Manchester school, or, indeed, with any school or party likely to represent the spirit of the time. His lordship certainly came to the conclusion that the English people were prepared to support schemes of aggressive imperialism; he supposed that an exaggerated parody of the policy of Palmerston would win the applause of democratic constituencies. His error, I shall be told, led his party to political ruin, and has been finally exposed. The nation preferred Mr. Gladstone's sermons to Lord Beaconsfield's bluster, and, instead of listening to Jingo songs at the music halls, filled the meeting-houses to hear addresses on the blessings of peace and the iniquity of war.

The Liberal triumph of 1880 was no doubt an impressive fact (as, by the way, was also the Conservative triumph of 1874); it certainly suggested the idea that the doctrines of Mr. Cobden had been adopted by the nation, and that all Englishmen were prepared to become members of the Anti-Aggression League. But the inferences suggested by the result of the campaign in Midlothian are hardly borne out by the effect on public sentiment of the campaign in Egypt. The electors who applauded Mr. Gladstone when he denounced the invasion of Afghanistan heard with apparent pleasure of the bombardment of Alexandria, took with perfect indifference the retirement from the cabinet of the one member who really advocated the principles of the Peace Society, and would, it may reasonably be supposed, not be much perturbed if the conquest were to end in the annexation of Egypt. I have no wish to blame the Egyptian policy of the Government; it admits, I think, of fair apology. The only point on which I am concerned to insist is, that the way in which that policy has been received by the elect-

ors makes it impossible to conjecture what is the opinion of the people on matters of peace or war.

What, lastly, is the true sentiment of English electors with regard to the government of Ireland? Are they profoundly indignant at Irish crime and lawlessness, or do they, on the whole, think that Ireland ought to be left to the Irish, and that the demand for home rule is not unreasonable? Here, as on other points, politicians are in the dark. When Lord Palmerston was told that an extension of the franchise would not alter the class of persons elected members of Parliament, he replied, it is said: "Yes, the players will be the same, but they will play not to the pit or boxes, but to the gallery." The dictum cuts far deeper than most of the few sayings attributed to his lordship. What neither Palmerston nor any other prophet anticipated was that the players would be at fault for want of knowing what were the tunes with which the gallery would be pleased. Half the hesitations of English statesmanship are due not to cowardice, but to ignorance. They are ministers of the democracy, and they cannot tell for certain what are the wishes of their monarch.

English democracy is at present a puzzle to itself no less than to its leaders. The whole course, indeed, of popular government rests on the assumption that about every leading question of the day a definite "public opinion" exists; or, in other words, that a large majority of the nation have a decided view, one way or another, upon all the great issues which are the topics of political controversy. Every sensible person knows that this assumption is, to a certain extent, fictitious. On many matters of very high importance the mass of the electors never form, nor can form, any decided judgment whatever. The most which can be expected of them is that they should decide who are the persons by whom such matters as, for example, the right mode of recruiting for the army, the best methods of administering the national finance, and the like, are to be determined. But what seems to have escaped the notice of theorists and politicians is, that the more democratic a country becomes, and the greater, therefore, the importance of public opinion, the more likely it is that on subjects even of supreme consequence no real public opinion should, in fact, exist. This is, I suspect, constantly the true state of things in modern England. The majority of the electors have, on many topics, no opinion what-

ever. They may be prepared to distrust Lord Salisbury or to trust Mr. Gladstone; they may have perfectly adequate grounds for this sentiment of confidence or suspicion. But on the definite question whether the English army should be kept for years in Egypt, whether Austria ought to be bidden to keep her hands off Bosnia, they may well entertain no decided or predominant conviction whatever. This, of course, is not invariably the case. The experience both of England, and I conceive of the United States, shows conclusively that the people do occasionally, and especially on broad matters of opinion which appeal to strong feelings, make up their mind with a decision and emphasis which throws out all calculations of politicians. But the existence of a definite predominant public opinion is likely to become more and more the exception, not the rule. As things at present stand, English democracy is a puzzle to itself, because it does not know its own mind, or, to speak plainly, because it does not possess one mind which can be known.

Third. A prudent critic, who has realized the difficulty of our topic and the extreme doubtfulness of all dogmatic assertions as to the permanent characteristics of such a body as the democracy of England, will confine himself as far as possible to noting "tendencies." It is quite possible to assert, with some confidence, that bodies of persons tend to act in a certain manner, when it would be most unwise to assert that they always will, or necessarily must, act in the manner indicated. Of the tendencies which, judging by the experience of the last fifteen years, are exhibited by the people of England, or, in other words, by the majority of the English electors, three are specially noteworthy.

The electors are apt to be guided rather by their confidence, or want of confidence, in men than by their opinion as to measures. No one, whatever his own political bias, can doubt that, in different ways, the personality both of Lord Beaconsfield and of Mr. Gladstone has told to an extraordinary extent on the course of politics. His lordship, with all his skill, talent, or genius, never possessed the art of gaining popular confidence. He could not, like Palmerston, enlist in his favor the ordinary every-day feelings of commonplace Englishmen. He could not, like Mr. Gladstone, evoke the moral feeling of the masses and appeal to the morality or the sentiment of the crowd. The indignation at Bulgarian atrocities was aroused quite as much by

the cynical indifference of the premier as by the cruelty of the Turks. Lord Beaconsfield, without knowing it, served the cause of Russia quite as effectively as did Mr. Gladstone. His lordship's personal character influenced the crowd by way of repulsion. Of the force exerted by Mr. Gladstone on the ordinary electors by way of attraction, one can hardly speak in too strong terms. The very qualities which repel a good number of so-called educated Liberals conciliated the men who, in 1880, crowded to the ballot-boxes. There is something worse than childish in the attitude of critics who, before the elections began, described Mr. Gladstone as little better than a raving maniac, and who, when the elections proved that this madman really understood the people of England, will not admit the immense influence exercised by Mr. Gladstone's personal talents and genius.

The electors again exhibit an almost unmistakable tendency (traceable, as it seems to me, also among the citizens of America) to be swayed far more strongly by appeals to feeling than by appeals to considerations of interest or of policy. The whole Midlothian campaign is, of course, one example of this tendency; but it is by no means the only example. We may deplore or may admire the disposition to be moved by appeals to moral feeling, but that this disposition exists throughout the majority of the population, both in England and in America, appears to me hardly to admit of doubt. Certainly all agitators or reformers act on the supposition that the people are more easily moved by an appeal to the heart than to the head. Mr. Plimsoll's plans were assuredly marked by more benevolence than wisdom. Mr. Plimsoll, going nearly out of his mind on the floor of the House under the pressure of philanthropic excitement, was hardly a sight to kindle the sympathy of statesmen. But Mr. Plimsoll, just because of his benevolent excitability, became for a time a sort of power in the state; and Mr. Plimsoll's ideas are a typical instance of the kind of policy which gains success by its appeal to genuine popular benevolence and to the far less respectable popular superstition that benevolent objects can always be secured by the interference of the state. There is a close connection between the tendency of a democratic society to be swayed by its feelings and the equally marked tendency of such a society to rely on the effectiveness of state inspection and interference for the protection of classes who are, or seem to be, unable to protect themselves.

Nothing, lastly, can be more remarkable than the calmness exhibited by the democracy of England under what might appear to be great provocation. The whole course of Irish affairs, since the present ministry came into power, has been calculated to provoke English Liberals. All English and Scotch business has been postponed for the sake of remedying Irish grievances. The Land Act, and measures connected with the Land Act, have occupied the whole time of Parliament, and nothing or little has been done to meet the wishes of English electors. What is worse than this, the attempt to remove or lessen the grievances of Ireland has frittered away the energy, the prestige, and the power of the Liberal party, and to the ordinary elector, at any rate, it may well seem that the sacrifices made in order to content Ireland have all been made in vain. As one Conservative orator after another has, in effect, pressed upon the public, supposed concessions to justice have only fostered discontent, and a message of conciliation has been answered by outrage and assassination, yet the English electors have, as far as their acts can show, kept perfectly calm. The tragedy of the Phoenix Park provoked no outburst of popular anger. The so-called "Kilmainham Treaty," which, though one of the wisest strokes of policy ever attempted by an enlightened ministry, was naturally offensive to popular sentiment, has been the theme of much Tory invective, but has not stirred the masses. The attitude of the democracy is no doubt capable of different interpretations. Liberty, and the habit of public discussion, may at last have produced a condition of general reasonableness utterly opposed to violent outbursts of passion. It is possible, on the other hand, that a crowd of electors, occupied in the daily struggles of life, and only on rare occasions interested in questions of policy, may feel far less keenly on matters of national interest than did the smaller constituencies who, fifty years ago, withdrew their confidence from the Whigs because the Whigs were supposed to be in alliance with O'Connell. Whatever may be the true explanation of the attitude taken up by the English people about Ireland, the fact is certainly noticeable that O'Connell, who was assuredly loyal to the Crown, who wished to act in harmony with the English Liberal leaders, and who strove to keep the agitation for repeal within the strict limits of law, excited in his generation tenfold the hatred which has in the present day been aroused by Mr. Parnell, whose schemes of home rule necessarily tend to the

absolute independence of Ireland, who has thwarted every liberal effort to conciliate the Irish people, and who has certainly not been able to keep his followers within the bounds of the law. Here, as elsewhere, what be the true sentiment of the English democracy is to a certain extent an enigma.

One remark ought to modify every theory or observation as to the English people under the influence of more or less democratic institutions. It is, that the permanent historical characteristics of Englishmen are of far more importance than any which may be produced by the gradual change of political and social institutions. There is no reason to believe that English democrats, even should the democracy become completely supreme in the state, will be found, for good or bad, to differ essentially from Englishmen who are not democrats. If this be so, the further inference may safely be drawn that in one shape or another Conservatism of some sort, a tendency to keep things as they are, an adherence to rather commonplace notions found to be in conformity with common sense, will be a characteristic of democratic, as it has been of monarchical or aristocratic England.

A. V. DICEY.

COÖPERATIVE DISTRIBUTION.

THE story of Coöperative Distribution in the United States opens in the decade 1830-40. The New England Association of Farmers and Mechanics, which held its first convention in February, 1831, was apparently the earliest organization to introduce and discuss resolutions upon this subject. The topic was agitated in different labor organizations in that decade, and some stores were started. These early experiments soon disappeared, leaving no accessible records behind them. In October, 1845, a dozen persons opened a store in an upper chamber over the Boylston Market, Boston. Its first purchases were a box of soap and a half chest of tea. Out of this little germ grew an enterprise that, in its best days, carried on a trade of from \$1,000,000 to \$2,000,000 per annum. The store was started by members of The Workingmen's Protective Union. The local divisions formed branches of a central supply agency. The trade of the association was reported as follows: 1848, \$112,507.79; 1849, \$220,801.60; 1850, \$535,338.56. In 1849 its name was changed to the New England Protective Union. An analysis of the returns to the Central Division for the year ending December 31, 1850, shows the number of divisions to have been 106, 83 of which returned a membership of 5109, while 84 returned a capital of \$71,890.36. The highest amount held by any one division was \$2765.51, the lowest being \$150, averaging thus \$855.63. For the succeeding quarter, 67 divisions reported having purchased through the central agency to the extent of \$102,341.04, an average of \$1527.47. The largest trade made at this time by one division was by No. 55, of New Bedford, which in 1849 made a total sale of \$31,278.64. The amount purchased through the agency in nine months of 1851 was \$619,633.16. By October, 1852, the number of divisions had

grown to 403, of which 167 reported an aggregate capital of \$241,712.66, and of which 165 divisions gave an aggregate of sales for the year of \$1,696,825.46.

Discord finally split the organization. The new branch took the name of The American Protective Union. The old organization showed, in 1855, 72 divisions reporting, with 4527 members, an aggregate business of \$1,130,719.29. The decline set in the next year. The new branch did a business, between 1853 and 1858, ranging from \$1,000,000 to \$1,536,000 per annum. In 1859, the board of government believed that there were 600 stores in operation. By this time the decline had begun in this branch also. The aggregate business for 1859 was only \$930,376.36. Both branches were soon practically defunct. The great majority of the local stores were gradually wound up, or passed into ordinary joint-stock concerns or into private hands. The civil war put an end to most of the few that lingered on that far. A handful endured even that strain, and some live still, under new names generally; *e. g.*, the stores in Worcester, New Bedford, Natick, etc. The Natick store presents a fine example of fidelity to true coöperative principles and of continued prosperity. It has been now in existence for twenty-two years. Its semi-annual dividends have always been ready promptly. The capital stock, originally fixed at \$2000, has been raised to \$6000. It is held now by 564 members in \$10 shares. Its last report (Dec. 30, 1882) shows sales for the year of \$129,265, from which there were net profits of \$2298, a return of \$3.60 on each share of \$10. Of experiments outside of Massachusetts during the period before the civil war no reliable data are at hand.

Fincher's "Trade Review" recorded the renewed interest that showed itself in many quarters in the opening of the decade 1860-70. It gave accounts of meetings held to agitate the subject, of calls for information, for lectures, etc. It noted, between November, 1863, and May, 1866, the establishment of thirty-six stores in ten States. A number of other stores were mentioned as projected. The extent of this movement we may better judge from the fact that the "Review" noticed a conference of coöperative stores in Boston, wherein a plan for a wholesale store was recommended, and a contemplated conference of the stores in New York State. Some of these stores started off with great encouragement. The Providence store made sales of \$1200 in

the first week, and of \$1500 in the second week, and the sales rose within six months to as high as \$600 a day. The Troy store sold to the extent of \$5000 in the first two weeks. The Roxbury and Charlestown stores even reported sales of \$6000 each in the first week. Cheering tidings of progress were noted from time to time in the "Trade Review." The South Reading store reported for the ninth quarter sales of \$11,801.25. The Troy store made sales in its first six months of \$36,825.43. The Chelsea store claimed sales in its first year of \$90,000.

Alongside of these signs of success appear brief records of stores that had failed. The "Review's" chronicle closes in May, 1866, the paper then going out of existence, and we lose our only general guide for this period. We find, however, scattered local data, indicating a continuance of the movement. Massachusetts reported, officially, in 1868, the existence of twelve distributive associations in eleven towns. Their united capital amounted to \$47,000, and the aggregate membership to 1859. Other stores followed in the same State. Sporadic developments of stores appear to have taken place through the country. Some of them have continued in operation to the present time and have won notable successes. The First Worcester Coöperative Grocery and Provision Store was organized in 1867. In 1875 it reported 590 members, and an annual sale of \$75,000. In 1881 it reported a paid-up capital of \$5000, with reserves of \$1113. The Acushnet Coöperative Association was organized for the sale of groceries in 1867. It reported, in 1875, a membership of 100, a share-capital of \$6900, in shares of twenty-five dollars, assets amounting to \$13,622, an annual trade of \$71,000, and a dividend of about thirty-two per cent. on the members' capital. During the three years ending with 1874 the association paid dividends amounting to 240 per cent. on its share-capital.

The Fall River Workingmen's Coöperative Association was organized in 1866 as a joint-stock company. After about three years' experience, it re-organized on the Rochdale plan. At the close of its first year it had sixty-five members and a share-capital of \$3600. By the close of 1874 its membership had increased to 260, and the share-capital to \$19,734, while its assets were about \$50,000. During 1874 its sales were \$79,615, and its net profits for the year were \$9155. In the eight years of its existence up to 1875, the store had sold goods to the value of \$425,277; had paid to members, as interest and dividends, \$38,179; and

had divided among purchasers, not members, \$4757. In 1881 the association reported a paid-up capital of \$17,381.

Under the pressure of the hard times in the next decade (1870-80), the Order of the Patrons of Husbandry (founded in 1867) took on large proportions. In six months of 1873 more than 10,000 granges were formed. The membership doubled in 1874. At the meeting of the National Grange, in November, 1875, the secretary reported 24,290 granges, with a membership of 763,263. The minutes of the National Grange show from the start a discussion of various schemes of coöperation, with references to experiments actually made. The favorite method was an imperfect form of coöperation, in which each local grange resolved itself into a purchasing club, and the various granges of a State united to support a general agent, who, combining the orders of the scattered clubs, bought in large quantities at a considerable discount, and shipped by car-load to the several granges at reduced rates. The business of these agencies became immense. Pennsylvania had an agency-store in Philadelphia filled from top to bottom with samples. The Ohio agency, in one year (1875), ran a business of a few thousand dollars to "not far from one million," with a saving to the granges of \$240,725.40.

The "Economist" of November 8, 1876, declared that "their records show twenty State purchasing agencies, three of which do each an annual business of \$200,000, and one of which does an annual business of \$1,000,000. Patrons have five steam-boat or packet lines, fifty societies for shipping goods, thirty-two grain elevators, twenty-two warehouses for storing goods." Some of the grange organs made huge claims as to the savings thus effected. "The P. of H. saved \$5,000,000 in 1872 and \$12,000,000 in 1874." This system of State agencies assumed proportions beyond the business talent and experience the Order could furnish, and great losses ensued.

The attention of the Order was drawn to purer forms of coöperation. The subject of local stores was discussed at great length. The ninth session of the National Grange (1875) presented a careful plan of organizing such stores, conforming in essential particulars to the Rochdale model. This was widely scattered through the Order, and, it is believed, was generally followed in the experiments made. Unfortunately, there are in print no accurate accounts of the spread of these stores and of their experiences. The "Economist," in 1876, declared: "It is quite

impossible to enumerate the grange stores, but one hundred and sixty are recorded." The official records of the National Grange use only general language: "Local stores are in successful operation all over the country" (1879). "There are large numbers of coöperative associations in various sections of the country. . . . Some have succeeded beyond the most sanguine expectations of those interested in them; others have failed" (1881).

Educational influences were contemplated and secured in these coöperative associations. The local granges met stately, often in their own halls, to discuss economic and other questions. They established circulating libraries and schools of agriculture.

The reaction usual to all rapidly developing movements befell this Order in the latter part of the decade, aggravated by the relaxing effects of returning national prosperity. Of late, however, there appears to be a revival in the Order.

A second great organization furthering coöperation arose in 1874—the Sovereigns of Industry. This was a secret Order, with ritual, etc., open to all classes except lawyers.* The preamble to the constitution of the National Council stated its object thus:

"It will try to establish a better system of economical exchanges, and to promote, on a basis of equity and liberty, mutual fellowship and coöperative action among the producers and consumers of wealth."

The growth of the Order was rapid. Within forty days from the organization, councils were formed in eighteen States. At the first annual meeting of the Massachusetts Council (December, 1874), one hundred councils were represented, with ten thousand members. The second annual council reported one hundred and sixty-six councils with twenty thousand members. In 1877, the National Council had reports from councils in seventeen States and territories. At first the members of a local council used to club together in buying at a certain store, saving thus from ten to twenty per cent. They would buy flour by the carload, saving from two to three dollars a barrel. A general distributing agency was established in Chicago, through which all local councils could procure goods direct at cost. The General Council urged upon the Order the establishment of coöperative

* It is a notable fact that both of these Orders were open to women, and that the S. of I. made women eligible to every position in their ranks; some of the councils electing women as presidents.

stores upon the Rochdale system, and clearly and accurately enunciated the principles and methods of that system in a plan printed for free distribution. The advice seems to have been widely followed. The report of the Committee on Methods of Trade reported fifty stores in Massachusetts in 1875. The "Sovereigns' Bulletin" of May, 1875, mentions that "within the past few months a large number of coöperative stores have been started by members of the Order in many different States."

By 1877 the number of stores reporting to the Massachusetts Council had fallen to twenty-nine, fifteen of which were joint-stock companies and fourteen of which were carried on upon the Rochdale plan, with total sales per month of \$49,806. There were eight stores not reporting to the council. The address of President W. H. Earle to the National Council in Syracuse, March 20, 1877, said :

"Ninety-four (94) councils, selected from the whole, report a membership of 7273, and with an average capital of only \$884 did a business last year of \$1,089,372.55. This was equal to a saving of \$21 to every man and woman belonging to these councils. It is safe to assume that the unreported sales will swell the amount to at least \$3,000,000, which, at the same ratio of profit as above reported, would make a saving of \$420,000."

The president's address to the fourth annual council (1878) presented returns from seventy-five stores. Forty-five councils reported an aggregate trade for the year of \$750,000; while thirty-five councils reported capital in the stores they represented of \$58,000. It was proposed at this time to create a coöperative exchange, under the title of The New England Sovereigns of Industry Board of Trade, to promote direct coöperative trade or exchange.

Ten of the leading stores reporting to the Order showed an average capital of \$2630, with an average trade of \$34,000. "It is worthy of note," says the address, "that all these stores have conducted their business upon the Rochdale plan." The address further stated that "nearly the entire trade reported has been conducted on the Rochdale plan." Some of these stores have continued prospering to the present time. The Silver Lake Coöperative Association commenced business in July, 1875, with a capital of only \$430. In 1877 it had a capital of \$1200, and did a business per annum of about \$15,000. Its expenses, all told, were about \$912 a year. In 1881 its paid-up capital was \$1770;

sales not reported. The Old Colony Coöperative Association, Kingston village, opened its store in 1875, and in 1877 was doing business at the rate of about \$30,000 per annum. It reported for 1881 a paid-up capital of \$4680, with a balance of profits of \$419. The Saxonville store was, in 1877, doing business to the amount of \$48,000 per annum, on a capital of \$1700.

In 1878 the Order was considering larger plans, *e. g.*, a whole-sale store, a warehouse, etc. But soon after this serious troubles were experienced in the Order, whose nature is only partially divulged in the reports of its councils and the columns of its organs. All other sources of trouble were aggravated by the relaxing of the pressure of hard times that had forced men into combination. The founder and chief leader of the Order seems to have labored heroically, in a thoroughly religious spirit — but in vain. In April, 1880, the "Sovereigns' Bulletin" noticed a meeting of the Executive Committee of the National Council, which would "probably take some final and definite action as to the Order." There is no record of the funeral.

In addition to these organized movements to build up coöperative distribution, there have been, from 1870 onward, numerous stores springing into being, from purely local interest. Massachusetts reported, from the best information to be procured, in 1875, fifteen independent stores as having been organized since 1870, with an aggregate capital of \$29,260; and twenty such stores as then in operation, with a capital of \$67,351. This shows that five stores had lived on from the preceding decade, averaging a capital of over \$7500. In addition, there were several societies mentioned as not reporting to the State. Eight societies, reporting officially to the Labor Bureau, gave aggregate sales of \$500,000 per annum.

In New York State we find both failures and successes during this period. Two of the latter may be noted. The Farmers' and Mechanics' Trading Company, Seneca Falls, was founded in 1872, and re-organized in 1878. Its tenth annual report (Dec. 31, 1882) shows sales for the year of \$13,386.97, an increase of over \$1500 upon the preceding year. The net profits for the year were \$721.62. It has already paid in dividends more than the amount of capital invested in 1872, and the undivided profits are now equal to the sum of eighty per centum in excess of the capital still remaining invested in the business. The Port Jervis Coöperative Association, founded in 1878, in its seven-

teenth quarterly report (March, 1882) shows sales during the quarter of \$10,500, being an increase of \$2000 upon the same quarter of the previous year. It declared an annual dividend of six per cent. on the stock and of three per cent. to all purchasers. The profit accruing to the reserve fund amounted to \$120. The association was at this time considering propositions to buy a central lot and build a store thereon, and to connect the present store with various points in the suburbs by telephone.

New Jersey had a number of stores started in this period, details of which the Labor Bureau finds it hard to get at. The Raritan Woolen Mills Coöperative Association, one of the most successful ventures in the State, it is believed, was organized with a capital of \$2810, and has now a capital of over \$9670. The sales for the year ending October 8, 1880, were \$95,821.39, and for the six months ending April 8, 1881, were \$54,590.45, or over \$9000 per month. Ten per cent. has been paid on the capital stock and from five to six per cent. on the purchases. Ohio gave birth to a number of experiments in this decade. Accounts are had of eight stores in 1877. Their sales ranged from \$2500 to \$66,000 per annum, and their net profits from \$170 to \$6300 per annum. In Pennsylvania two examples of successful stores may be taken from the extreme sections of the State. The Neshannock Coöperative Society, Neshannock Falls, Lawrence County, was founded early in 1874. Its thirty-fifth quarterly report (January 31, 1882) shows sales for the quarter of \$10,-307.53, with profits of \$1057.85.

The most brilliant success achieved in the country has been won by the Philadelphia Industrial Coöperative Society (limited). It was incorporated in 1875. Starting with one store, it has now six stores: a main store, a store for boots and shoes, one for meats and provisions, one for dry goods, and two branch stores. Its first quarter's sales were about \$2600. Its sales for the quarter ending February 18, 1882, were \$51,413.63, being an increase upon the preceding quarter of over \$11,000. The gross profits for the quarter were \$4516.52, which, after paying the usual claims of share-capital, fixed stock, and legal reserve, and four per cent. on non-members' purchases, enabled the society to pay a dividend on members' purchases of nine per cent., and still left a small balance. There are now upward of a thousand members.

There have been some curious phases of coöperative distribution. The dividing stores of Fall River bade fair at one time to

create a clearly marked species. The earliest opened was in 1865, in a wooden shed owned by a mill corporation. By 1874 there were 34 such stores. The number of families represented at this time was about 1200. These stores did not cherish any of the nobler sentiments which animated the Rochdale weavers, nor did they embody the practical wisdom of those sagacious Yorkshiremen. They seem to have sold as near cost as possible, and to have had no educational or other fund. The saving effected was not made plain to all the members, as is done where the usual prices are followed, and the profits are set aside as dividends. So when, in 1874, a strong firm of grocers from Boston opened a branch in Fall River, their low rates cut out most of the dividing stores. There are now seven of them in existence, representing a membership of about 1200 persons. There is in Philadelphia a store started, built up, and chiefly managed by women. A small number of women, three winters ago, bought their groceries together at wholesale — barrels of flour, chests of tea, bags of coffee, etc.—and distributed them among themselves. They were so well pleased with the experiment that they formed a Working People's Coöperative Association, with shares at \$2 each. They have opened a store on Mondays, Wednesdays, and Saturdays, from 7 to 10 P. M., when one of the women is in charge. Shares have been reduced to \$1 apiece. A small profit is charged for rent and other expenses. There was a store in Springfield, Ohio, early in the decade 1870-80, whose membership was confined to colored people.

A renewed activity in coöperative distribution marks the current decade. Stores are reported as starting up in many sections of the country: four in New Jersey, four in Pennsylvania, seven in Michigan, etc. Even distant Montana is stirring itself. Some of these new societies start off vigorously. The Dorchester store (organized 1880) reported sales for 1881 of \$30,000. The Lansing (Mich.) store began in a small way with a paid-up capital of only \$300, and is now doing a business of upward of \$32,000 per annum. Troy (N. Y.) has lately opened a store with a fine spirit of determination on the part of one or two members — young men who have been several times disappointed already, but are resolved to make a success of this venture by shouldering the chief labor of it. Another instance of the same determined spirit — to which coöperation has always owed its successes — is found in Springfield, Ohio, where, after repeated failures, a new store is

about to be started through the agency of a few sturdy souls. As already indicated, the Patrons of Husbandry seem to be reviving, and in the new impetus of this Order coöperation is sharing.

The late secretary of the National Grange writes: "Hundreds of coöperative stores upon the Rochdale plan are in successful operation all over the country, while a number of large wholesale or supply houses are running at various centers." That this is no empty boast is evidenced by the official reports from one State, and that a frontier State. The Texas Coöperative Association, Patrons of Husbandry, in its third annual report (July, 1881), gives seventy-five coöperative granges as connected with it. The general manager reports (May, 1882) 103 distributive associations. He writes: "Our growth has astonished all alike. We have not had a single failure where the true Rochdale principles have been adhered to." The secretary writes (April, 1882): "The business is a wonderful success thus far."

Two new labor organizations have come to the front with the present decade, each of which emphasizes coöperation. The Central Labor Union, a federative body of the trade associations of New York City, in its first semi-annual report (July, 1882) presents coöperation as one of its chief aims. The Knights of Labor, the newest national order, seeks, according to the fourth plank in its declaration of principles, "the establishment of coöperative institutions, productive and distributive." The claim this Order makes as to membership warrants the hope that if it seriously essays to embody this principle, something substantial may result to the cause of coöperation.

This bird's-eye view of the story of coöperative distribution in the United States shows a very much larger development than is usually supposed. Owing to the obscurity incident to these humble enterprises, their shrinking from public notice and the ephemeral character of many of them, data are peculiarly hard to gather; so that the probability is that the real extent of this movement is very imperfectly indicated in this paper. Most of the experiments have undoubtedly been failures. The causes of this non-success appear to have been largely those experienced in the Old World. Incompetent and dishonest management, selfish and impatient members, vicious methods of doing business recur with saddening iteration in the history of these stores. Larger social forces have made our country, thus far, a hard field for coöperation. The general

prosperity of the nation has indisposed men to small savings, and active competition has cut prices in most necessities to a figure that has left little margin for such stores. Mr. Quincy's conclusion confirms the general experience in this country, as in England, that "stores on the Rochdale plan are not adapted to large cities." Philadelphia's development of thrift in her wage-earners, and the education in association won by them in the wonderfully successful building and loan associations of that city, probably explain her exceptional experience. It is, however, an exaggeration of the ill-success of this movement to say, with Mr. Barnard, in "Coöperation as a Business," that, "in this country distributive coöperation has been marked by almost utter failure." Enough has been indicated of real success to make it seem probable that before long, with the rapid oncoming of new and harder conditions for the workingmen of this country, Mr. Collyer's jesting assurance to George Jacob Holyoake, at the reception tendered him last autumn, may turn out literally true: "We have been altogether too comfortable hitherto to do much in coöperation, but by and by we will show you the biggest thing out in this line."

R. HEBER NEWTON.

EARLY MAN IN AMERICA.

WHO were the earliest inhabitants of America, and when did they live? are questions which have generally been approached solely from the point of view offered by discoveries in the United States, and, until within the last three or four years, have been discussed only on the slender basis of the Calaveras skull and the implements found in gold-mining in California. In the following essay I propose to deal with them as portions of one great problem common to the Old and New Worlds, and to show that the first traces of man, as yet discovered, prove him to have lived in the same low stage of culture on both sides of the Atlantic, at a time when the hands of the geological clock pointed to the same hour over the greater part of the world. The story of early man in America is a part of the greater story of the first appearance of man on the earth, so far as he has yet been revealed by modern discovery.

Before we enter into these questions, we must define clearly what is meant by the geological clock. In dealing with events recorded in documents, we not only know the relation of one event to another, and how long an event was in coming to pass, but we can accurately measure the intervals in terms of years. This obviously cannot be done without chronicles of some sort or another. In the great geological past outside history, we have no such evidence of the flow of the years, and we can only arrange our events in due relation to each other, without knowledge either of the length of time necessary for each, or of the length of any of the intervals. Consequently we cannot fix a date, in the historical sense, for events which happened outside history, and cannot measure the antiquity of man in terms of years. The present rate of the retrocession of the Falls of Niagara, or of the deposit of Nile mud, or of stalagmite in caverns, or of the accumulation of the rocks themselves, or of

the movement of glaciers, have been vainly used as natural chronometers, on the assumption that they have been going on at the same rate through all the past, and have been warranted never to stop, or to want winding up, or to go faster or slower than at the moment the observer was looking at them. Such attempts are so obviously futile that it is not a little strange to find them seriously made by men like Wallace and Mortillet. The antiquity of man is to be measured simply by an appeal to the succession of events in the geological record, by the changes in the face of nature, in climate, in geography, and in the forms of life.

The change in life has been so regular, definite, and orderly in the geological past, that it enables us to classify the rocks over the whole world into Primary, Secondary, and Tertiary groups. In the last of these, the higher types of Mammalia become more and more specialized as we draw nearer to the frontiers of history; and their pedigrees, when traced from one period to another, assume the shape of genealogical trees, such as that which Professor Marsh has discovered for the horse. The living orders first appear in the Eocene, the living genera in the Miocene, a few living species in the Pliocene, while nearly all the living species come in in the Pleistocene division. Again, in the interval dividing the last from the Historic period, the domestic animals appear and the cultivated fruits, and this—the Prehistoric—gradually passes into the period embraced by the written records. The succession of events may be used as the figures on our dial-plate, marking the lapse of geological time in the Tertiary period, as follows: (1.) The Eocene period, in which the placental mammals now on the earth were represented by extinct allied forms belonging to existing families and orders. The order Primates, to which man belongs, is represented by creatures allied to the lemurs both in the Old and New Worlds. (2.) The Miocene, in which the alliance between living and extinct mammals is more close, and living genera appear. The Primates are represented by a higher division, the family of apes, in Europe and in the United States. (3.) The Pliocene, in which, for the first time, living mammalian species appear; but they are few in number compared with the extinct species. (4.) The Pleistocene, in which the living species are more abundant than the extinct among the Mammalia, and the Primates are represented by their highest development, the family of man.

(5.) The Prehistoric, characterized by the present fauna and flora, being in possession of the regions in which they have been known historically. Man has increased and multiplied on the earth, and is possessed of domesticated animals and cultivated fruits, and has acquired the arts of spinning, weaving, mining, and pottery making in the Old World, and gradually passed through the Neolithic, Bronze and Iron stages of civilization.

(6.) The Historic, or period covered by written records, which varies in each country, going back to 4000 B. C. in Egypt, and in America to the time of Christopher Columbus. Were the extinct species taken into account, it would be seen that they fill up the interval separating one living form from another, and that they approximate to living species as they approach nearer to the present time.

It will be seen from the examination of the above periods that the inquiry into the antiquity of man is limited to the last four. The most highly specialized form in the animal kingdom cannot be looked for until the lower animals by which he is now surrounded made their appearance. We cannot imagine him to have been living in the Eocene age, when animal life was not sufficiently differentiated to present us with living genera of placental mammals. Nor is there any probability of his having appeared on the earth in the Miocene, because of the absence of placental mammals belonging to living species. It is most unlikely that man should appear in a fauna in which there was no other living mammal. He belongs to a more advanced stage of evolution than that presented by the mid-Miocene of Thenay, in which flint splinters fashioned by man are said to have occurred. Up to this time, the evolution of the animal kingdom had advanced no farther than the *Simiadae* in the direction of man, and the apes then haunting the forests of Italy, France, and Germany were the most highly organized types. We may also look at the question from another point of view. If man were upon the earth in the Miocene age, it is incredible that he should not have become something else while those changes were going on in the conditions of life by which all the Miocene land mammalia have been so profoundly affected that they have either assumed new forms or been exterminated. It is impossible to believe that man should have been an exception to the law of change. Nor in the succeeding Pliocene age can we expect to find traces of man upon the earth. The living placental mam-

imals had only then begun to appear, and seeing that the higher animals have invariably appeared in the rocks according to their place in the zoölogical scale, Fishes, Amphibians, Reptiles, Placental Mammals, it is hardly reasonable to suppose that the highest of all should then have been upon the earth. The few scored bones in the Pliocene strata of Italy, referred by Prof. Capellini to the work of Pliocene man, are considered by Evans and Mortillet to have been marked by the teeth of the large sharks abundant in those seas. And if they be artificial it is not, in my opinion, proved that they were marked in the Pliocene age. "The fossil man of Denise" is of uncertain age, and other alleged cases of Pliocene man in Europe have now been given up.

The question has however been revived in the United States by Prof. Whitney, in his work on the Auriferous Gravels of California, and the existence of man in California, in the Pliocene age, has been accepted by such high authorities as Marsh, Le Conte, and others. It becomes, therefore, necessary for us to see how the facts will stand the test of criticism. In the first place, it is assumed that the auriferous gravels in the Sierras, with traces of man, which are in some places three hundred feet thick, and sometimes covered with ancient lava streams, are of Pliocene age. They are, however, proved by their fossils, identified by Dr. Leidy, to have been deposited by the streams from the Miocene (*Elotherium*) age down to the present time. Among the animals we may note the skull of a mustang, identical with that of Mexico and California, which could not have been buried in the gravels of Sierra County before the time of the Spanish conquest, when the living race of horses was introduced. Consequently, the discovery of human remains in the auriferous gravels does not prove that man was an inhabitant of Pliocene America, even if it be allowed that they are of the same age as the strata in which they lie. There is, however, no evidence of this in any one instance. The objects themselves point to a directly opposite conclusion. The stone mortars, pestles, polished stone axes, beads, etc., found at various depths, are identical with those scattered over the surface, and used by the Indian tribes of California, described by Bancroft in his "Native Races of the Pacific States," and more recently by various writers in the seventh volume of the United States Geographical Survey under the direction of Captain Wheeler. The human bones are

indistinguishable from those of the Red Indians. The famous Calaveras skull, according to Prof. Wyman, is related to the Indian type, with a doubtful affinity with the Eskimos. It was obtained from a shaft sunk through three alternate layers of gravel and basalt, at a depth of one hundred and thirty-two feet from the surface, was associated with the remains of other individuals, and had been buried along with shell-beads of the kind usually met with in Indian interments. Had these remains been found near the surface they would have been undoubtedly classified with the ordinary traces of Indians, and their occurrence at so great a depth is the sole cause of their being the object of special interest.

Nor have we to go far to account for their presence at great depths. It is very strange that Prof. Whitney should have ignored the fact that mining operations have been carried on in those very districts long before the time of "the forties." "In 1849," writes Schoolcraft ("Archæology," vol. i., p. 105), "the gold-diggers at one of the mountain diggings, called Murphy's, were surprised, in examining a high, barren district of mountain, to find an old site of a mine, with a shaft two hundred and ten feet deep, at the bottom of which were a human skeleton, an 'altar,' and other remains of an ancient people,—probably Indian." In other ancient mines in the Western States, as Dr. Southall has recently pointed out, human skeletons have been met with, which prove that gold mining was extensively carried on long before the discovery of gold in the present century. The whole group of human remains, therefore, in the auriferous deposits, instead of proving the existence of Red Indians in California in the Pliocene age, belong to a comparatively modern period. Some are probably the results of interments which took place in deep mines or in superficial deposits, while others have found their way by accident into the auriferous gravels from the surface at various times. The famous ode of Bret Harte, in which he humorously puts down the Calaveras skull to a miner from Missouri,—“But I'd take it kindly if you'd send the pieces home to old Missouri,”—is true so far as the mining is concerned, and M. Simonin was not so wide of the mark as appears at first sight, when he seriously followed Mr. Bret Harte in ascribing, in the "*Revue des Deux Mondes*," the "Pliocene skull" to "*un mineur Missourien*." The remains, looked at purely from the archæological point of view, are Neolithic, and identical with

those which unmistakably belong to the ancient Indian tribes of North America. We cannot seriously entertain the idea that mankind first appeared on the earth in the Neolithic stage of culture, identical, so far as we know, in every respect with the ancestors of the present Red Indians, at a time when there were but few living species of the higher mammalia, and that he lived in California before cañons from two to three thousand feet had been cut by the existing streams out of the solid rock. Neither in the New nor in the Old World is there any trace of Pliocene man revealed by modern discovery.

We come now in our inquiry to the succeeding period, when the higher Mammalia, now contemporary with man, appeared in force on the earth, and man himself may be reasonably looked for. We will take the point of view, first of all, offered by Europe. The Pleistocene, or Quaternary, period in Europe is characterized by the arrival of numerous living species, which are divisible into four natural groups, according to their present *habitats*. To the first belong those now living in the temperate zone in the northern hemisphere, such as the mole, musk-shrew, beaver, lynx, wild-cat, wolf, fox, martin, ermine, stoat, otter, brown and grizzly bear, horse, bison, urus, saiga antelope, stag, roe, fallow-deer, and wild boar. They emigrated from Asia, and some pushed their way as far south as northern Africa. The second consists of arctic animals, such as the arctic hare and lemming, musk-sheep, reindeer, and wolverine. These animals also came from Asia, and found their way as far to the south as the Alps and Pyrenees, and as far to the west as Ireland. The third group is composed of those animals now enjoying the cold climate of high altitudes in Europe, such as the chamois, ibex, and Alpine marmot. The fourth is represented by animals now only found in warm countries, such as the lion, panther, African lynx, spotted and striped hyena, hippopotamus, and African elephant and porcupine. The remains of these animals lie scattered over southern Europe, and as far to the north as Yorkshire, and to the west as Ireland. With these, certain extinct species appear, hitherto unknown, such as the straight-tusked elephant, mammoth, pigmy elephant, woolly and small-nosed rhinoceroses, the Irish elk, pigmy hippopotamus, and the cave bear. The distribution of these animals throws a flood of light on the geography and climate of Pleistocene Europe. The British Isles, at the time of their migration, must have formed

part of the continent, and the evidence is tolerably clear that the hundred fathom line off the west coast of Ireland was then the Atlantic coast line. The area of the North Sea was a broad, open valley, gashed by a deep fjord extending close to Norway and as far as Denmark. The Mediterranean occupied a much smaller area than it does now, and was isolated from the Atlantic by a land barrier, extending in the direction of the Straits of Gibraltar, along which the animals could migrate freely between Spain and northern Africa. It was also cut into two deep basins by a neck of land extending northward from Cape Bon, by way of Malta and Sicily, along which the animals, now found in the bone caves and river deposits of those regions, could freely pass. To account, indeed, for the distribution of animals in the islands, we must believe that, in those days, the Mediterranean area was elevated about 2400 feet above its present level, a change which would unite Corsica and Sardinia to France, turn the Adriatic into a broad valley, and elevate the islands of the Greek Archipelago into mountain peaks.

The climate of Europe at this time differed considerably from that of the present day. To allow of the northern animals penetrating as far south as the Alps and Pyrenees, the temperature in middle Europe must have been low, while it must have been high for animals of warm habits, such as the hippopotamus, to have lived as far north as the British Isles. The remains of both these groups are so intermingled in the river deposits and caves throughout middle Europe—hippopotamus with reindeer and the like—that it is impossible to refer them to periods separated from each other by long intervals. In most of the caves the gnawed remains prove that the reindeer formed a large part of the prey of the spotted hyena. The solution of this difficulty lies in the fact that Europe was then a large tract of land, reaching from northern Africa far into the Atlantic, and therefore enjoyed a continental climate, with the summer heat greater than now, and the winter cold more severe. But this only disposes of one part of the difficulty, for it is not likely that the animals would swing to and fro over such a wide area as that reaching from the Pyrenees to the Baltic in one season. There must, therefore, have been some other cause at work, and that cause is distinctly shown, by the ice marks scattered far and wide over the flanks of the mountains of central and southern Europe and over the low-lying districts in the north, to have been a secular and gradual

lowering of temperature, until it reached its minimum, probably with long pauses and possibly with the return of warmer conditions. Owing to these climatal changes every inch of ground, in middle and western Europe, would successively form a frontier between the northern and southern animals, and their remains would be mingled together as we find them to be. During the extreme cold, the arctic animals would arrive at their southern limit. Closely following on this lowering of the temperature to its minimum, geographical changes of great magnitude took place in the north of Europe. The area to the north of the line passing from the lower valley of the Severn eastward into Russia was depressed beneath the waves of a berg-laden sea, and again lifted up so that the British Isles, then an archipelago, again formed part of the main-land. As the land emerged from the water, the Pleistocene forests crept over it, and the animals found their way over the southern and midland counties.

Such as this was the scene on which man first appears in Europe. Rude splinters of stone, and roughly chipped pebbles of flint and chert, at their very best trimmed to an almond shape, and mostly intended for use in the hand, occur abundantly in the river deposits of England and France, in association with the remains of the above animals. They are the implements of savages living by the chase, and probably also by fishing and fowling. Not only have the implements been discovered, but the very spots on the river-bank where the hunter sat and made them have been identified, as at Crayford and other places in the valley of the Thames. Could we have penetrated to the banks of the Thames, or of the Seine, in those times, guided by a thin column of smoke rising over the trees till we reached the camp of the river-drift hunter, we might have seen the men selecting blocks of flint and chipping their implements out of them, the women preparing the half raw meal of flesh, it may be of reindeer, mammoth, or rhinoceros, while the children broke the silence of the evening with their shouts on those very spots where are now to be heard, day and night, the voices of London and Paris.

Nor can there be much doubt as to the relation of the river-drift hunter to the above-mentioned changes in climate and geography, which are usually summed up under the term Glacial. The balance of evidence is in favor of the view that the hunter at Crayford was in the valley of the Thames before the submergence, and before the temperature had reached its minimum,

or in other words, in Preglacial times. The river-drift hunter whose implements are left at Abbeville traversed the shore of a berg-laden sea, and possibly may have inherited a tradition from his ancestors of the famous hunting-grounds then lying at the bottom of the British Channel and the great Northern Ocean. The hunter who followed the hippopotamus and the reindeer in the valley of the Ouse, near Bedford, was there after the reëlevation of the land and the cutting of the valley through the mantle of boulder clay which had been dropped from the melting bergs. He probably went far enough northward to see the glaciers then crowning the Pennine chain and the mountainous regions of Wales.

Southward, the river-drift man wandered far and wide over France, hunting the same animals in the valleys of the Rhone, Loire, and Garonne as in the valley of the Thames. In the Iberian peninsula he was a contemporary of the African elephant, the mammoth, and the straight-tusked elephant, and he camped in the neighborhood both of Lisbon and Madrid, showing here, as in France and Britain, singular facility in choosing places, which became, in the long ages which were to follow, the sites of great capitals. He also ranged over Italy, leaving his implements behind in the Abruzzo; and in Greece, in the neighborhood of Corinth, he was familiar with the extinct pigmy hippopotamus. We can also track him south of the Mediterranean by the implements found in Oran, and near Kolea in Algeria, in the Sahara, and in several places in Egypt. At Luxor, they have been discovered by General Pitt Rivers in the breccia, out of which are hewn the tombs of the Egyptian kings. In Palestine, they have been obtained by the Abbé Richard between Mount Tabor and the Sea of Tiberias, and by Mr. Stopes between Jerusalem and Bethlehem. Throughout this wide area the implements are of the same rude type, and generally of the same materials, flint or quartzite, those of Luxor and Palestine being identical with those in the river valleys of Britain and of France. Throughout this area, too, the river-drift man hunted some or other of those animals which we have mentioned above.

Nor is our survey yet ended. He is proved by many discoveries to have ranged over the Indian peninsula, from the valley of the Nerbudda in the north as far as Madras. Here we find him forming part of a fauna in which are to be numbered species now living in India, such as the Indian rhinoceros and

the arnee, as well as extinct types of oxen and elephants. There were two extinct hippopotami in the rivers, as well as living gavials, turtles, and tortoises. It is plain, therefore, that at this time the higher mammals of India stood in the same relation to the present Indian animals as the European fauna of the Pleistocene does to that now living in Europe. In both there was a similar association of living with extinct forms, and in both the central figure is the river-drift hunter.

We are led from the region of tropical India to the banks of the Delaware in New Jersey, by the recent discoveries of Dr. Abbott, in the neighborhood of Trenton, which I have had the opportunity of examining with that gentleman and Professors Haynes and Lewis. The implements are of the same type, and occur under exactly the same conditions, as the river-drift implements of Europe. They are found in a terrace of river gravel and loam overlooking the river, and are composed of materials derived from the old terminal moraine which strikes across the States of New Jersey and Pennsylvania in the direction of Lake Erie. The large blocks of stone which it contains indicate that during the time of its accumulation there were ice rafts floating down the Delaware in the spring, as in the Thames, the Seine, and the Somme in those days. According to Professor Lewis, it was formed either during the time when the glacier of the Delaware was retreating ("Late Glacial") or a later period ("Post-Glacial"). The physical evidence is clear that it belongs to the same age as the deposits with similar remains in Europe. The fossil animals—the reindeer, bison, and mastodon—found in it also point to the same conclusion. These animals belong to a fauna occurring in fluvial deposits in North America, composed of the same elements, and even some of the same species (as may be seen in Dr. Leidy's lists) as that of the Pleistocenes of Europe. In it living and extinct forms, and those now found in warm and cold regions, were mingled together. To the temperate division belong the Virginian deer, the bison, raccoon, and the stag, the beaver and the elk; to the northern, the reindeer and musk-sheep; to the southern, the tapir and peccary. Among the extinct species we may note the American variety of the mammoth, the mastodon, and the great sloths—*Megatherium*, *Megalonyx*, and *Myiodon*, as well as a species of capybara and of musk-sheep. The *Felis atrox* of Dr. Leidy I am unable to distinguish from the cave-lion of Europe. All these animals were probably familiar to the river-drift

hunter as he passed northward to the edge of the great glacier, or southward into the tropics of Central America. He was encamped at Trenton either while New York lay buried under the ice—which has left its unmistakable marks in the smoothed rocks of the Central Park—or while that ice was melting away. Thus, in our survey of the conditions of life when man first appeared in Europe, India, and North America, we see that the animal life was in the same stage of evolution, and that “the old order” was yielding place “unto the new” in these three regions so widely removed from each other. The river-drift hunter is proved by his surroundings to belong to the Pleistocene age in all three.

It remains for us to weave the scattered threads of the inquiry into general conclusions. The identity of the implements proves that the river-drift hunter was in the same rude state of civilization, if it can be called civilization, in the Old and New worlds, while the hand of the geological clock pointed to the same hour. It is not a little strange that his mode of life should have been the same in the lands bordering on the Mediterranean, in the tropical forests of India, and on both sides of the Atlantic. The hunter of the reindeer in the valley of the Delaware was the same kind of savage as the hunter of the reindeer on the banks of the Thames or the Seine. It does not, however, follow that this identity of implements implies that the same race of men ranged over this vast tract. While this may be left an open question, it certainly indicates a primeval condition of savagery, from which mankind has emerged in the long ages that separate it from our own time. We may also infer from his wide range that the river-drift hunter (assuming that mankind sprang from one center) inhabited the earth for a long time, and that his dispersal took place before the glacial submergence and the lowering of the temperature in northern Europe, Asia, and America. It is not reasonable to suppose that the Straits of Behring could have offered a free passage either to the river-drift man migrating from Asia to America, or to the American animals from America to Europe, while there was a great barrier of ice, or of sea, or of both, in the high northern latitudes.

It will naturally be asked who and what was the river-drift hunter. The question can only be partially answered in the present stage of the inquiry. The few fragments of human

bones, beyond doubt associated with the implements, are too imperfect to offer any evidence as to race. They, however, point out unmistakably that he was a man, and not "a missing link," and that he was without traces of Simian ancestry, such as have been ascribed to him, by Mortillet and others. On this important point I entirely agree with Dr. Virchow. The river-drift man has vanished from the face of the earth without leaving any clew to his identification with any living race. After him the race of cave-men appeared in Europe, now represented by the Eskimos.

We may realize before the rock-hewn tombs at Luxor the impossibility of measuring the date of the river-drift hunter in terms of years. In the interval between the time of his encampment on the site of ancient Thebes and the rise of the splendor of Egypt, the conditions of life described in the preceding pages passed away, and man had progressed from the hunter stage of civilization into that of the Neolithic, of the Bronze, and of the Iron ages. He stands on the other side of an abyss of past time, the depth of which has not been, and which in my opinion cannot be, fathomed.

W. BOYD DAWKINS.

ASTRONOMICAL COLLISIONS.

THE universe of space is, in one sense, full and crowded. Everywhere our telescopes find stars; and for every one we see there are probably hundreds, and even thousands, too faint or small or far away to reach our senses. And of this countless host of worlds not one is at rest, but all are rushing through space, free and unbridled, with velocities far exceeding anything in the range of our terrestrial experience. Our swiftest cannon-shot takes more than three seconds to go a mile, but the stars and planets seldom move slower than five miles a second, and some of them go two hundred. The veriest snail among them would overhaul a rifle-ball in the same sort of way that the rifle-ball would overtake a receding freight train. Is there not, then, danger of collisions? Have such collisions ever occurred; and, if so, with what consequences?

Now, in the first place, it is only in a sense, and rather a Pickwickian one, that space can be called crowded. True, stars are to be seen in every direction; but this is because our vision reaches so unimaginably far. If we restrict our consideration to bodies of respectable magnitude,—a hundred miles in diameter, for instance,—we ought rather to say that space, instead of being crowded, is almost inconceivably empty. Between any star or planet and its nearest neighbor, lie usually desolate distances of millions, or even millions of millions, of miles. If we assume, what is probably an under-estimate, that the region commanded by our telescopes is so vast that light takes a thousand years in coming to us from its outer confines, and, further, that the number of its stars is a thousand millions (the number visible with our largest telescopes is usually estimated at about sixty millions), then we find that the average distance from star to star must be about nine millions of millions of miles. This is not quite half the actual distance from the sun

to our nearest stellar neighbor (α Centauri), according to the received value of its parallax; but it is a distance which quite defies the power of human comprehension. If two stars at such a distance were rushing straight toward each other with a speed of ten miles a second, it would require nearly thirty thousand years to bring them together. Represent the sun, as in Sir John Herschel's familiar illustration, by a globe two feet in diameter, so that oranges, cherries, peas, and pins'-heads would stand for the different planets at distances ranging from eighty feet to two miles, then, on that scale, α Centauri would be eight thousand miles away. Obviously, there is plenty of elbow room in the universe, and the chance of two stars accidentally jostling each other is far less than that of the collision of two bullets in mid-air over a battle-field. Still the possibility remains.

There is a prevalent impression that the immunity from collision between the heavenly bodies depends mainly on their being held in orderly orbits by central attraction; and it is true that their orbital constraints make it quite impossible for the *planets* to collide with each other, or even to approach each other very closely. But a very impressive picture is sometimes drawn of what would happen if the earth, for instance, should some time free herself from the bonds of gravitation—how she would fly off into space (which is true, of course), and soon dash herself to pieces against some other wandering world (which is not true at all, or at least not probable). Most likely, if gravitation were suddenly to cease, the earth would travel for millions, not of years, but of ages, without ever encountering anything more important than meteors, such as are now continually falling upon her surface. And these meteoric encounters, even, would probably be far less frequent than at present, since there is reason to suppose that such bodies are much more numerous in the neighborhood of the sun, and of other great stars, than in the rest of space.

Evidently, however, the attractions between a wandering star and others lying near its path must considerably increase the chances of collision, though not to so great an extent as perhaps might be supposed. A body entering our system at a distance from the sun one hundred times as great as the radius of the earth's orbit, and moving with no more than the velocity natural to a comet at that distance (about $22\frac{2}{3}$ miles per second), would not strike the sun unless its path were directed within less than half a degree ($23'.4$) of the sun's center; and if

its velocity were greater, the aim would have to be still more accurate to score a hit. If bodies were shot into space at random from the position and with the velocity indicated, only about one in eighty-six thousand would hit the sun. Were it not for the sun's attraction, however, the proportion would be twenty thousand times smaller still—only one in seventeen hundred millions.

It is obvious, therefore, that encounters between heavenly bodies of considerable magnitude must be extremely rare. There is not in all the astronomical record a single certain instance of such an occurrence. And yet it may confidently be asserted that some time or other in the past such events must have happened, and some time in the future will happen again; simply for the reason that, in a sufficient length of time, the most improbable things, if only not impossible, are sure to come to pass. Now, it is almost certain that the stellar motions are not such as to render collisions impossible: the planets, it is true, as has been said before, can never run into each other, because of the size and nature of their orbits, but, so far as can now be ascertained, nothing of the sort holds good for the motions of the stars. We already know enough about some of their so-called "proper motions" to be quite sure that, as a fact, they are not traveling in any simple curves around any common center, and also that some stars are flying through space with such velocities that no attraction, such as can reasonably be supposed to act in the premises, can control them. Nor does theory, any more than observation, indicate a structure of the stellar universe at all analogous to that of the planetary system. Among the stars there is no central dominance and no imperial power, but we have to do with a republic of comparatively free and independent members.

Sir William Thomson is therefore fully justified in writing: "It is as sure that collisions must occur between great masses moving through space as it is that ships, steered without intelligence to prevent collision, could not cross and recross the Atlantic for thousands of years with immunity from collision." Undoubtedly, the chance of an encounter between a pair of heavenly bodies, selected at random, is trifling, almost beyond the power of computation, and the intervals of time between such catastrophes, in that part of the heavens subject to human observation, must be, on the average, enormous; but yet, in

infinite time and unbounded space—somewhere or other now, sometime or other here—such things are happening, or will come to pass.

If ever two great worlds do really meet in this way, it is possible to predict some of the consequences. To use the technical language of science, “their energy of molar motion will be converted into various forms of molecular and potential energy”; which, translated into the vernacular, means that there will be evolution of heat and light, while at the same time the solids present will be wholly or in part liquefied, the liquids vaporized, and the vapors and gases rarefied and expanded. The intensity of the action will depend, of course, mainly upon the mass and swiftness of the colliding bodies; but an easy calculation shows that if our earth were ever to meet another globe like herself, and moving with the same velocity, heat enough would be generated by the shock to transform them both into a huge ball of vapor; unless, indeed, the central core of the earth is much colder and more refractory than usually supposed. At any rate, the quantity of heat developed would be sufficient to melt, boil, and completely vaporize a mass of ice fully seven hundred times that of both the colliding worlds—an ice planet 150,000 miles in diameter.

If, however, the impinging masses were, to begin with, mainly gaseous (as the sun seems to be), the effect might be curiously different. Heat would, of course, be generated, just as in the case of solid bodies; but, as a consequence, apparently most paradoxical, the resulting nebula might actually be cooler than either of the bodies before the encounter; of course, it would be immensely expanded in volume. Just as a gaseous mass, contracting under its own gravity from loss of heat by radiation at its surface, continually rises in temperature, so a similar mass, expanding against its own gravity from accession of heat within, may fall in temperature,—nay, must fall, if the body is composed of “perfect” gas. Of course, immediately after the collision, and before the ultimate expansion of bulk was attained, the temperature and brilliance of the mass would be for a time vastly increased, but the final result would be as stated.

In a preceding paragraph it was said that we have not on the astronomical records a single certain instance of any collision between bodies of considerable size. But there have been several cases of a most remarkable phenomenon, which perhaps may owe its explanation to such encounters. Stars, never before vis-

ible, or else known only as faint and minute, have suddenly blazed out, shining sometimes with the brilliance of Sirius, or even Venus, and afterward faded away to their original insignificance. Such was the famous star of 1572, so carefully observed by Tycho Brahe. As recently as 1866, and again in 1876, similar things have happened, though these later stars were less conspicuous. The star of 1876 (in the constellation of Cygnus) had long been known and catalogued as a telescopic star of the ninth magnitude, with nothing to distinguish it from any of the common herd. On November 24th it suddenly shone out as bright as the pole-star. Schmidt, of Athens, who discovered it, had been observing that very region of the sky only four days before, and no such object was then visible. The intervening days were cloudy, so that we cannot tell precisely the hour when it first blazed up, but evidently its increase of brightness must have been extremely rapid. Immediately after Schmidt's observation it began to fade, but it was two weeks before it fell below the sixth magnitude and became invisible to the naked eye, and it was more than a year before it resumed its original faintness. Its whole course was carefully watched with the spectroscope. At first, and for some months, like the star of 1866, it showed conspicuous in its spectrum the lines of hydrogen, together with other lines of uncertain origin. As its brightness decreased the hydrogen lines faded still more rapidly, leaving other lines more prominent, until, at last, the spectrum, instead of becoming that of an ordinary star, came to consist simply of three bright lines, the spectrum of a nebula, and it continues such to this day. Whether this is, or is not, the same spectrum it had before the outburst no one can say, as it had never been observed with the spectroscope before.

Now, I am very far from asserting that this was a case of collision; and yet it is clear enough that the whole course of phenomena was very much what might have been expected if it were. At any rate, the collision hypothesis is held and defended by several astronomers of authority, and the principal reason for preferring a different possible explanation lies in the fact that these "temporary stars," as they are called, are far too common to be probably due to stellar encounters. We have on record eight since the Christian era, and no less than three of them since 1840.

It is hardly necessary to say, that if any retinue of planets attends such a star, its sudden blaze cannot fail to carry disas-

ter and destruction to all life upon them. We can conceive that forms of life may be possible under almost any imaginable physical conditions, provided only the course of events by which they have been reached has been gradual enough to allow the necessary adaptations. One would not dare to deny the possibility of life of some kind on the airless moon, or even on the sun itself. But all we know makes it certain that no planetary life could survive the tremendous and catastrophic change of conditions involved in a sudden thousand-fold increase of the solar radiation.

Thus far we have been considering only collisions of stellar masses. But space is filled also with minor particles, separated from each other only by intervals of a few hundred miles; and these, in the form of meteors and shooting-stars, are rushing through space, dropping continually upon the larger worlds, increasing their size, and adding to their store of heat and energy. Every year the earth encounters nearly three thousand millions of them, according to the estimate of Professor Newton, ranging from the merest particles to masses of several hundred-weight. Very probably, also, the comets belong to the same category, being really nothing but larger meteors, or flocks of small meteors, or perhaps even only puffs of meteoric dust. Nearly all the meteors which strike the earth are very minute. Perhaps a hundred or so reach the ground each year as recognizable masses of stone or iron, weighing from an ounce or two to some hundreds of pounds, but all the rest are dissipated in the upper air, and never come down unless as impalpable dust, not to be certainly identified. The whole amount of matter falling daily upon the earth from outer space is probably about one hundred tons on the average (it is variously estimated from twenty-five to five hundred). A hundred tons is in itself a very considerable quantity, but utterly insignificant as compared with the mass of the earth, and entirely incapable of appreciable effect upon our temperature. Assuming even the largest estimate (five hundred tons a day), and also that the average velocity with which meteors enter our atmosphere is fifteen miles a second (probably considerably too large), we find that the heat annually received from them by the earth is only about fifty-three calories for each square meter of her surface,—less than would be imparted by two minutes' perpendicular sunshine, and only about $\frac{1}{60,000}$ of the heat actually received from the sun

in a year. Retaining the same extravagant estimate of five hundred tons a day, it appears that the earth's diameter would grow an inch in about one hundred millions of years, and that her distance from the sun would be reduced about eighty-three feet in a million years, in consequence of the resistance experienced in moving through the meteoric swarms.

It would not, however, be just to the general reader to dismiss the subject without fair notice that some most eminent astronomers hold views at variance with those above expressed. The late Professor Peirce maintained to the end that the heat of the sun is chiefly due to the impact of meteors, and also that the earth itself receives as much heat from meteors as from the sun, a necessary result if the solar heat is really so produced. Of course, we have no space to discuss the matter here, and must be content with merely saying that the quantity of matter which falls upon the earth, if his idea is correct, ought to be easily noticeable, amounting to about fifty tons a day on each square mile. It involves also serious difficulties in the planetary theory.

So far as human beings are concerned, the most important question connected with our subject is whether anything is to be feared from comets, as a consequence either of collisions with the earth or of their fall into the sun. It may be said, just as of the stars before, first, that cometary collisions, either with sun or earth, must be very rare occurrences; and, secondly, that they are practically certain to happen sometime or other. Babinet computed, on the one hand, that a comet would strike the earth on the average about once in fifteen million years; on the other, we know at least three comets whose orbits cut the earth's path so closely that, if they should ever reach the crossing at the same time as the earth, a collision must occur. These comets are known as Biela's, Tempel's, followed by the Leonid meteors in its train, and the comet of 1862, which precedes the Perseids. One of the three, however (Biela's), has probably ceased to exist as a comet, and it is quite possible that the other two may vanish in the same way before we meet them.

As to cometary encounters with the sun, no comet has yet been known actually to strike the sun, but several have grazed very near it. The great comet of last year brushed through the corona, and came within three hundred thousand miles of the photosphere, and there is no assignable reason why some other comet should not actually pierce it.

As to the consequences of a comet's collision with the earth,

it is impossible to predict them with scientific certainty; probably, however, they would be insignificant. We know absolutely that the whole quantity of matter in a comet (technically, its "mass") is extremely small compared with that of the earth; but just how small no one can say. It is impossible to contradict authoritatively either the man who says he could carry a comet home in his pocket if properly packed, or one who asserts that a comet's nucleus is equivalent to an iron ball one hundred miles in diameter. An attempt has been made to get at the density of the central nucleus on the assumption that it holds to itself the enormous volume of the head and envelopes by its gravitational attraction, as if the surrounding nebulosity were an atmosphere in equilibrium around the nucleus; but the assumption is more than doubtful, and the derived conclusion, of course, is of little value. It seems, on the whole, more probable that a comet is throughout only a cloud of dust and vapor—a mere smoke-wreath—than that there is at the center any solid kernel of preponderant mass.

If a comet really has at the center any great mass of stone or iron, or even a close-packed swarm of aerolites weighing a ton or two apiece, collision with it would of course be a most serious matter, spreading devastation and conflagration possibly over half the globe at once; not amounting, probably, to anything like a destruction of the world, but far more disastrous than any earthquake or volcanic eruption. It is far more likely, however, that the encounter with a comet would be entirely harmless,—simply a most magnificent and brilliant shower of shooting-stars lasting for an hour or two,—a phenomenon which one might well desire to see.

As for the effect of a collision between a comet and the sun, in respect to which there has been much disquieting speculation of late, the probability is that we on the earth should never know it, unless we happened to be expressly watching the event. For a few minutes, just as the nucleus was piercing the photosphere, there might be some unusual flash of brilliance and a fine outburst of solar prominences, followed, perhaps, and very probably, by intense magnetic and auroral disturbances on the earth; but the main thermal transformation of the impinging energy would be effected far below the visible surface of the sun, and would result merely in a slight expansion of its bulk, far too slight to be detected by terrestrial astronomers.

C. A. YOUNG.

THE SAINT PATRICK MYTH.

NEAR the close of 1882, a Bollandist, groping amid ancient MSS. in the Royal Library at Brussels, turned up a treasure precious in his eyes as the great Australian nugget. This was the full text of the "Life of St. Patrick," by Muirchu Maccumachtheni, which he compiled at the suggestion of Aedh, Bishop of Sletty, who died in 698. This is the earlier of two ancient narratives contained in the "Book of Armagh," compiled about the year 807. The other, Tirechan's, was already complete. The difference between these two earliest Lives of the Saint is that Tirechan relates precisely that Patrick received his commission to instruct the Irish from Pope Celestine. Muirchu does not mention the pope. It has been a theory that the lost part of the "Book of Armagh" contained some reference to Patrick's visit to Rome and his commission by the pope. That, however, has now been set at rest: there is no such reference in the recovered text. The fifth of Muirchu's chapters is headed, "*De inventione sancti Germani in Gallii*"; and it states that Patrick, having traveled *per gallicas Alpes ad extremum*, found a home with Germanus, at whose feet he sat, as Paul at the feet of Gamaliel, when, in a vision, he was directed by his angel, Victoricus, to go to Ireland. For that mission he was consecrated by Amatorex, by whom may be meant Amator, predecessor of Germanus (St. Germain), then Bishop of Auxerre. This also is probably fictitious, as we shall see; but it may be noted here that in the eighth century the only thread by which Patrick was connected with the Church of Rome was an alleged consecration by a Gallican bishop. But, the reader will exclaim, of what earthly importance to any human being can it be, whether an Irish bishop of the fifth century was ordained by Pope Celestine, or Amatorex, or the angel Victoricus, or neither? Be patient, O reader, and you may find hereabouts the germ, not

only of much interesting Irish history, but of the phenomenal results of the last papal circular concerning Parnell and his League.

But did Patrick ever exist? This cannot be determined with absolute certainty. The grounds of doubt are as follows: All authorities agree that Palladius was the first Christian missionary among the Irish; that he was ordained for that work by Pope Celestine; that he was a friend of Germanus, and that he was styled Patricius in the Roman Martyrology, his day being March 16, the day before that of the received St. Patrick, when he (Palladius) is said to have died at Auvergne. The words are, "*Arvernus depositio S. Patricii episcopi.*" No contemporary ecclesiastical writer mentions Patrick, though nearly all mention Palladius. The most remarkable instance of silence is that of Bede, who mentions the missions of Palladius, Ninian, and Columba, but says nothing whatever of Patrick. That so minute and exact a historian, writing in the early eighth century, should not mention even the name of Patrick, has not been explained. Even in the writings of St. Columbanus, who flourished in the century after Patrick, the name of the latter does not occur. There is no mention of any person, supposed to be an individual Patrick, earlier than about two hundred years after he is said to have died. In a letter written by Cumman to Segienus, abbot of Iona, in the year 634, concerning the proper time of Easter, he speaks of the cycle "introduced into use by our pope, St. Patricius"; and Adamnan, a little later, writes of "Maucta, a pilgrim from Britain, a holy man, a disciple of St. Patricius, the bishop." Skene ("*Celtic Scotland*," ii., p. 17) accepts these as references to the St. Patrick, and as "sufficient to prove his existence"; but, notwithstanding such a weighty indorsement, skepticism will not fail to remember that Patricius ("our pope," as Cumman calls him) was the Roman title given to Palladius, and that it was borne by several others in the north. Tirechan himself, in the "*Book of Armagh*," speaks of the first Patricius and the second Patricius—*i. e.*, Palladius and Patrick. Patrick is, of course, no more a personal name than Cardinal. Muirchu (Brussels text) says that Patricius had four names—"Sochet, *quando natus est*; Contice, *quando servivit*; Mavonius, *quando legit*; Patricius, *quando ordinatus est.*" The first of these names is said to be British, and to mean "the god of war"; so that the baptismal name of Patricius is almost as suspicious as his ordination

name. It is a curious coincidence, if nothing more, that St. Martin, whose nephew Patrick is said to have been, appears to have received his name from "the god of war" (Mars).

Despite these and other grounds of doubt, the probabilities are thrown in favor of the existence of an individual St. Patrick by signs of genuineness in the two compositions claiming to have been written by himself. These are his "Confession" and the "Epistle to Coroticus." The "Confessio," which alone is important to this inquiry, was transcribed into the "Book of Armagh" from a manuscript then so old that the transcriber's difficulties in deciphering it frequently appear. This, of course, was more than three centuries after Patrick's death; but its authenticity is accepted by Skene, Todd, and others, mainly because of its freedom from the miraculous and extravagant incidents which at a later period accumulated about the name of Patrick. There is some superstition in it, but no statement of anything impossible; the style is simple, the latinity rude. Oudin attacked the authenticity of the document on the ground that no pontiff would have been so stupid as to send forth a missionary who could only write such barbarous Latin; but, as Todd well remarks, this is one of the strongest arguments in favor of the "Confessio," which is quite ignorant of any pontifical commission to Patrick. The contents of this Confession are briefly that he (Patrick) was the son of Calpurnius, a deacon, who had a small farm in the village of Bonaven of Tabernia; his father being a "decurio," or provincial Roman magistrate. In his sixteenth year he (Patrick) was taken captive and brought to Hiberio with many thousands. In Hiberio (as he calls Ireland) he was employed to tend cattle daily; he prayed much, often saying a hundred prayers in a day and almost as many at night. One night, in a dream, a voice said to him, "Thy fasting is well; thou shalt soon return to thy country." In a second dream, the same voice told that the ship was ready, but two hundred miles away (*cc. milia passus*). He then fled from his master, with whom he had been in slavery six years. He found the ship, and was roughly refused passage; but while he was praying, the sailors called him, and he was taken on board. They were three days at sea, and afterward twenty-eight days "wandering in a desert." Their provisions having run short, his companions said, "Thy God is great and almighty; why canst thou not pray to Him for us, for we perish of hunger, and no inhabitants are

here?" Patrick promised them that if they would turn in faith to God He would send them food, and soon after a herd of swine appeared. They also found some wild honey; but Patrick would not taste it because one of them said, "This is an offering; thank God," fearing that it had been offered to an idol. The same night he suffered a trial from Satan. A great stone seemed to have fallen upon him; he could not move. "How it came into my mind to call out Helias I know not; but at that moment I saw the sun rising in the heavens, and while I cried out, *Helias! Helias!* with all my might, lo, the brightness of the sun fell upon me, and straightway removed all the weight." He was sixty days with these sailors, and when they had no more food they arrived at human habitations. After a few years he was again with his parents, "in Britanniis," and they besought him not again to expose himself to dangers. "And there, in a vision at night, I saw a man coming to me as if from Hiberio, whose name was Victorius, bearing innumerable epistles. And he gave me one of them, and I read the beginning of it which contained the words, 'The voice of the Irish.' And while I was repeating the beginning of the epistle, I imagined that I heard in my mind the voice of those who were near the wood of Foelut, which is near the Western Sea. And thus they cried: 'We pray thee, holy youth, to come, and henceforth to walk among us.' And I was greatly pricked in heart, and could read no more; and so I awoke." In another vision he saw some one praying in him, who changed into the Holy Spirit. The "Book of Armagh," says "bishop"; but Todd, whom we are now following ("Life of St. Patrick"), suggests that the copyist confounded the contraction *sps.* (*spiritus*) with *eps.* (*episcopus*), and the context proves this. Another vision determined him to return to Ireland, though opposition is intimated. He then speaks of his success. "The sons of Scots (Irish) and daughters of chieftains now appear as monks and virgins of Christ." In the end Patrick speaks of himself as unlearned, a fool, and despised, and appeals to this and his success as evidence of his inspiration.

Although the marvels in this "Confession" are modest enough in comparison with many that we are asked to believe in the present day, a suspicious resemblance to Biblical events is now and then suggested by it; *e.g.*, the keeping of an alien's flocks; the wandering in the desert; the "wild honey"; the temptation in the wilderness—conquered, probably, with Christ's cry, *Eloi,*

Eloi, which copyists turned to *Helias*, which some say was Elias, and others Helios (the Sun). It is not unnatural, however, that a religious enthusiast, looking back over his life from the verge of the grave, should find in it the hand of God reflected as in the great Scriptural examples. If the "Confession" is a forgery, it could only have been forged by some party anxious to prove that Patrick's apostolate in Ireland was absolutely independent of ecclesiastical authority; for it is inconceivable that, if there had been any such journeyings on the Continent as are mentioned in the later biographies, any visits to St. Germain and St. Martin, or any commission from Pope Celestine, they would not have been mentioned in this narrative, which ends with the words, *Et hæc est Confessio mea antequam moriar*. We might, indeed, suppose that there was a British church which would be interested to maintain for their great man an independent authority, derived directly from heaven, through visions similar to those to which Paul appealed as his credentials; but, if this "Confession" was forged in their behalf, it is miraculously free from miracles, and its Latin is aimlessly bad.

On the whole it appears reasonable to conclude that St. Patrick became the specialized title of a preacher of gentle birth, but of comparatively little learning, who, born near Glastonbury and converted by British monks, started a British mission in Ireland where Palladius had failed; that, because he and his converts had no connection with Rome, they were as little regarded by the Church of Rome as the Salvation Army now is by the Church of England; and that their leader was not mentioned by contemporary historians, or by Bede, because he was not acknowledged by the Church of Rome, but even despised. "Therefore," he says, "be amazed, both great and small, who fear God; rhetoricians and ye of the Lord, hear and inquire who aroused me, a fool, from the midst of them who seem to be wise, and skilled in the law and powerful in speech and in all things, and hath inspired me (if indeed I be such beyond others) though I am despised by this world," etc. Here we hear the voice of a primitive George Fox, or Wesley, whose race in the British Islands is very ancient and lasting. In the course of time the Church of Rome was willing to reap what Patrick had sown; but it was always mainly a gleaner in Ireland. The prompt dismissal of Palladius, the pope's missionary, by the Irish, followed immediately by their enthusiasm for Patrick, are

facts whose significance cannot be escaped. It is a small thing now whether we call our stage Irishman after Palladius or Patrick, whether "Paddy" or "Pat," but we are using the watch-words of an ancient and long conflict. In the end Palladius was reduced to the position of a brief forerunner to Patrick, while the latter swelled to enormous proportions.

Turning now from the probable to the mythical Patrick, we find a figure which resembles a man only as the Trojan horse resembled a horse; he is full of armed men, a compendium of controversies. Of the portraits of St. Patrick, that in Kilkenny Cathedral could alone be associated with an individual character. One found in an old Irish prayer-book shows him the ideal Arch-druid. Another, much later, engraved by authority in Paris, 1629, shows him the ideal prelate, with patriarchal cross (two cross-beams), treading on snakes. A fourth I have seen in a window of Marmoutiers Convent, Tours, which shows him holding a blossoming thorn in his hand, and resembling the lowly monastic type of saint. A fifth, rudely pictured with several others in O'Leary's "Ancient Lives of St. Patrick" (New York, 1874), shows the saint conventionalized as the first person of an Irish triad, Saints Columba and Bridget being on either side of him. In reading the multifarious Patrick mythology, these figures seem summoned before the eye as varying types of the several classes of myths which have invested the saintliest name of Celtic Britain. The normal mythologic mantle of the canonical thaumaturgist is seen on the shoulders of one Patrick, broidered with legends of blind Gormas holding the infant's hand and, with a sign of the cross, causing a fountain to flow which restores his sight; of a wolf bringing back unharmed a lamb it had seized; of fourteen thousand fed with the flesh of five animals; and of a forty days' fast. But a more popular legendary mantle is that which Patrick took from the Druid magicians. There are extended accounts of how he prevailed over the marvels of these soothsayers with greater marvels; but a careful examination of the most impressive miracles of Patrick show that he came to be looked upon as a more potent Druid than the rest, and the stories of their power which he inherited prevailed in turn over his Christian miracles in the popular fancy. He dries up a flood, turns an unbelieving district into a marsh, sentences a river to sterility, makes a stone swim to float a leper whom a ship refuses to bear, causes one ma-

gician to be struck by lightning, another to sink into the earth, makes an ugly dwarf tall and beautiful, makes a kettle boil with blocks of ice, sinks a hostile ship at sea with a sign of the cross, and calls up or appeases tempests at will.

The Celtic story of the extermination of snakes from Ireland has so defied all efforts to catholicize it that it has been tabooed. It is even difficult to find any but recent and comical accounts of the miracle most popularly associated with St. Patrick. Nay, these modern ballads are now very hard to obtain; and in my efforts to search out the story I have found that the priests dislike the story and discourage its repetition. "I never before," says an eminent Irish priest in a note before me, "heard the question about the snakes spoken of in a serious manner. I don't think there is an educated Catholic in Ireland who believes a syllable of the story, and, as to the fact (?) of St. Patrick's driving them out, it is nowhere to be found recorded in any authority of any value." However, it is stated by Josceline, in his "Life of Patrick" written near the close of the twelfth century, that by the power of "the staff of Christ," the saint collected the threefold plague—snakes, demons, magicians—to the high promontory called Cruachan-Ailge, now Cruachan-Phadruig (Patrick), and sent them headlong into the sea. Dr. Phené, the antiquarian whose theory of the prevalence of serpent-worship in Europe and America is so well known, tells me that, on visiting the promontory in Ireland indicated by popular tradition, he found the further legend prevailing that the snakes all landed again at another point on the coast. On repairing to this lonely region (Glen Malin Mor), he found there an ancient mound of the kind which he identifies as the monument of serpent worshippers. Concerning this, it may be stated that the illuminations of the earliest Irish MSS. have snakes and dragons continually introduced. It may well be borne in mind that serpent worship, if introduced by colonists into a region where serpents did not exist, might be expected all the more to appeal to the imagination and flourish by exaggerations which could not be checked by experience. The large ammonites found in such numbers about Whitby were long believed to be serpents turned to stone by St. Hilda, though the superstition would have been impossible in any region familiar with serpents. Snakes, even in the Zoölogical Gardens at London, can only be kept alive by blankets, and in such a climate as Ireland they could not exist; the large

part they play in Irish folk-lore must therefore be ascribed to imported traditions. The legend of Patrick and the Snakes does not appear to belong to the well-known Aryan family of hero-and-dragon myths, wherein the huge single monster is not banished but slain, and human prowess rather than divine potency is illustrated. The Patrick Serpent-myth bears a nearer resemblance to certain Egyptian tales, as that of Setnare (Records of the Past, iv., p. 129), who obtained the magic book of Thoth, whose powers he exercised, by killing one "little serpent" among the many reptiles and scorpions which guarded it, the rest, apparently, taking to flight. There is a legend mentioned by Josephus that Moses cleared a region in Ethiopia of snakes. Geoffrey Keatinge's "History of Ireland," published early in the seventeenth century, however uncritical, is known to contain traditions of extreme antiquity, and extracts from MSS. not accessible; and in it are materials of high value to comparative mythology. The legend here is that Prince Gadelas, grandson of the Pharaoh who pursued Israel, being bitten by a serpent, was taken to Moses, who, with a touch of his rod, healed the wound. Moses also prophesied that wherever this prince, or any of his posterity, should reign, there should be no more serpents. The Gadelians having taken possession of Ireland, the snakes disappeared. "Some, I confess," says Keatinge, "are of opinion that there were serpents in Ireland till St. Patrick arrived to propagate Christianity in that country; but this assertion depends upon the figurative manner of expression, which is to be understood of devils or infernal spirits, that may be properly called serpents, and were expelled the island by the piety and preaching of this saint." According to another tradition, told me by a well-informed Irish lady, Gadelas brought with him Moses's identical serpent (either the rod or the brazen serpent), which ate up all the snakes in Ireland. I have also heard a folk-tale of the last of the expelled serpents, that he was so huge that St. Patrick had great difficulty with him; when the exorcism prevailed the tail of the monster was seen uncoiling from his cave near Dublin, while his head was passing out of Cork harbor. In the Devon legend of St. Petroc (probably St. Patrick) the huge size of a serpent similarly sent to sea is attributed to its having swallowed all the snakes of a pit into which the Christian martyrs were thrown.

The legendary Milesian epoch of Ireland opens with a ser-

pent-bite, and a curse on the serpent, and proceeds with a Cain-and-Abel story. Heber (shepherd), ancestor of the Hibernians, was slain by his brother Airem (ploughman). Airem (or Er) was founder of the race of tillers of the soil, or Feini (wagon-men). It will not be wondered that at the Flood the Irish had a Noah of their own: this was Fintan (afterward confused with Ronan), who, surviving the Deluge, became a kind of Celtic Wandering Jew, and is said to have lived down to the time of St. Patrick, to whom he gave accounts of the primitive history. Keatinge rejects this last legend with scorn, but we may find value in it. It appears incredible that this vast mass of traditions, many of which are not Biblical, but nearly all pointing to Egyptian and Jewish regions, could have been invented since the introduction of the Bible into Ireland. It seems tolerably certain that, anterior to the Christianization of Ireland, there were in Ireland eastern myths closely resembling those of the papyri, and that the stories of the Bible found there a congenial soil. The rod that became a serpent, and swallowed up the rest, was easily made to bud into a similar myth in a land free from snakes, but it bore further fruit of the old kind. There were momentous reasons why there should be ascribed to Patrick a Divine Legation; and for this end the rods of Moses and Aaron blended and budded, as they did in the East. For, although it was the rod of Aaron that budded, according to the Bible, tradition long pointed to a tree beside the synagogue at Djizeh as having grown from the rod of Moses. The town of St. Patrice, in France, is so named from a winter-flowering prunelle which is said to have grown from the staff of St. Patrick. But the rod of Moses-Aaron also blended with a legendary staff of Christ. Patrick, in his wanderings, came to an island where, entering a house, he found a young married couple and an extremely decrepit old woman. The youth informed him that the aged woman was his great-granddaughter. Many years before, Christ, in the guise of a pilgrim, had visited them and left his staff, the potency of which still preserved the life and youth of all who were alive at the time, though their children grew old and died like others. The youth offered Patrick the magical staff, but Patrick refused to receive it unless it were given him by Christ himself. He was then led into a mountain by his familiar angel, where Christ met him, gave him the staff, and ordered him to go to Ireland. This Patrick did, taking no counsel of

any Roman Catholic flesh and blood. He was the divinely authorized British pope, and, as we have seen, the earliest mention of him is under that title.

The mythological outcome of this early independence of the Irish Church is wonderful. Patrick is first an Irish Moses; his burning bush is visible in a supernatural fire, kindled on a hill, in sight of the pagans; the daughters of King Laoghaire (the Irish Pharaoh) find him beside the fountain, where they come to bathe; before Laoghaire he contends with the Druid soothsayers; and when the king orders his people to seize Patrick, a thick darkness falls upon the pagan hosts, with an earthquake; they kill each other, horses and chariots fly over the plain, and a remnant only escape to the mountain Monduirn. The mythological Patrick is declared to have lived to Moses's age, one hundred and twenty years. Two counties, Armagh and Down, disputed for his dead body, as Michael and Satan; and it is declared by some biographies (sixty-four are said to have been written) that the place of his burial is unknown to this day. Among the Eastern legends of Moses not found in the Bible one relates that, while he was keeping the flocks of Jethro, he searched long for a lamb lost in the wilderness, and carried it back in his arms; upon which Jahvé said, "This is the shepherd I have chosen to feed my human flock." In a Patrick legend, the Saint, when about to locate the first church in Ireland, found on the spot a roe and her fawn. His companions were about to slay them, but Patrick took the fawn in his arms and carried it, the roe trotting after, to a safe place. The legend told of both Moses and the infant Jesus, that a chief idol fell at their approach, is also told of Patrick.

The rod of Moses-Aaron was next transformed into the staff of Christ (long preserved at Armagh and Dublin, and publicly burned at the Reformation), and now blossomed into another mythology. Considerations of space prevent its being fully traced out here, but it must be said that Ireland developed something like a Christianity of its own. Its scheme of forms and miracles is now like some shattered church window, but the pieces can be sufficiently put together to show a sort of rude triad, a Madonna, and an Irish Purgatory, Hell, and Heaven. The miracles of Patrick are those of a primitive thunder-and-lightning deity, modified into an occasionally lenient *Pater*, or Father. St. Finnian (of miraculous and illegitimate birth), who

inherited his Sacred Staff and first brought the Gospels into Ireland, was the Son. St. Columba (dove) was the spiritual Third Person in this lost triad; while to St. Bridget was assigned the rôle of a Madonna. The ancient Irish Church was careful to enumerate its Twelve Apostles. One need only read Thomas Wright's essay on "St. Patrick's Purgatory" to discover that this miniature Irish Christianity included a complete eschatology. For some centuries it was one of the great superstitions of Europe, that those who entered the island cavern in Lough Derg passed on to witness the torments of Hell, the punishments of Purgatory, and finally the bliss of Paradise. The Keys of this Heaven and Hell were kept by the Priors until the fifteenth century, when a Dutch monk exposed the imposture, and by the pope's order the cavern was closed on St. Patrick's Day, 1497. (It is said, however, that the proprietor still gets several hundred pounds a year from the exhibition of this cavern, one of the tombs of the ancient Patrick Popedom.) According to an old poem ("Owayne Miles," MS. Cotton) it was here that Christ appeared to Patrick and gave him the famous staff (*baculus Jhesu*) and "a booke of gospelles," enabling him to give the obstinate pagans a convincing token of what awaited them in the future world.

It would exceed the aim of this paper to enter upon any speculative inquiry as to the sources of the Church of Patrick. There is no trustworthy evidence that St. Patrick came from or ever visited the continent of Europe. There are many indications that the original Irish Church was an independent formation, which resolutely defended itself from all encroachments of the Roman Catholic authority. It claimed a commission from Christ himself, and a power to cast out devils and tread on serpents, in his name alone. The earliest legends all point to this conclusion. It is related, for instance, that when St. Finnian, who held the *baculus Jhesu*, desired to visit Rome, an angel said to him: "What would be given to thee at Rome shall be given to thee here. Arise and renew sound doctrine and faith in Ireland after Patrick." The Apostles of Ireland went into various parts of Europe; they had a different tonsure, a different Easter from other Christians, and refused to change their customs at the pope's order. They found their prophecies of Patrick's advent in Druidic runes, and their authority in his miracles. In the middle of the twelfth century, the one English

pope (Nicholas Breakspeare, Adrian IV.) gave Ireland to Henry II. as a donation. Of the dragons' teeth sown by those two Englishmen in Ireland the harvest is too perennial and familiar to require description; but it is the irony of history that England forced upon Ireland the Roman Catholic authority which that people were afterward so remorselessly punished for acknowledging; until now, when England seeks help at Rome to govern Ireland, it is confronted by the revived spirit of Patrick and his non-Catholic church!

The pope enjoins on the Irish of to-day the obedience to Rome practiced by St. Patrick. If he should receive just that, his holiness would have to pray for the reverse. It would be rash to predict that Leo XIII. will receive the reply of St. Columbanus to Boniface IV., "Your jurisdiction as Bishop of Rome does not extend beyond the limits of the Roman empire"; but it will pretty certainly be found that the present pope will be as unable as his predecessors to sustain any practical point against the sentiments or interests of the Irish people. The pope never canonized an Irishman until the twelfth century, when the Archbishop of Armagh (Malachy) received that honor; but none the less it is Irish saints, with rare exceptions, after whom the churches of Ireland are named and who are worshiped at wells and other sacred places. The St. Patrick's Day celebrated by the peasants of Ireland is not that appointed by the church, but that of *Crum-duibh*, the old god, at the end of summer. M. Renan says: "Religion is the form behind which the Celtic races disguise their love of the ideal, but it would be a mistake to imagine that religion is to them a tie or a servitude. No race has a greater independence of sentiment in religion. It was not until the twelfth century, and owing to the support which the Normans of France gave to the See of Rome, that Breton Christianity was unmistakably brought into the current of Catholicism. It would have taken very little for the Bretons of France to have become Protestant like their brethren the Welsh of England." All this is true of the Irish, and no man understands it better than the last incarnation of the saint who is Renan in Brittany, Ronan in Britain, in Ireland Moronog (*i. e.*, my little Ronan); whose name is geographically a sacred foot-print of the British Celt. The sword of Cromwell destroyed the last possibility of union between Patrick and Protestantism; but it were easy for a pope to do the like

between Patrick and Romanism. In the fifth century, Ireland consisted of clans at war with one another. Each Irishman was so loyal to his clan chief that he would obey his order, were it to slay his own child. In all the accounts of the ministry of Patrick, he is never seen preaching to the people; he always goes straight to the chieftain, to convert whom is to convert his clan. There is no instance of a man's refusing baptism after his chief had undergone it. Patrick is a name for the union of many clans, and their incarnation in a Celtic clan-Christianity. Twelve hundred years of consecrated clan-loyalty are behind Parnell in his conflict with the Roman Leo and the British Lion.

"If you would understand a people, you must understand their gods," said Quinet. St. Patrick was, no doubt, a kindly man, but he became a vindictive deity; for he was figure-head of clans, with whom the *vendetta* is intertribal law. The English race cannot understand the spiritualization of a *vendetta*, and its transmission through a thousand years. Their own faith is founded on a feud between the seed of the woman and the serpent; but the English care less about that than for George and the Dragon stamped on a sovereign. Had Cæsar conquered Ireland, such ideas might have faded to phrases there also; but the Celt was conquered by the Saxon while as yet both were tribes; and the English have inherited the burthen of Saxon success, without any corresponding sense of the need of relieving themselves of it by magnanimity. But St. Patrick is more to the Irishman than a race-feud; this is but the shadow cast by the resplendent ideal on the future as the mirage of a fabulously glorious past. Lately, when Kelly was executed at Dublin, it was telegraphed to the London press that a crow perched on the prison, and remained there till the black flag was hoisted. Probably, if the natural history of that bird were traced, it would be found a descendant of that dark-plumed flock at which Patrick hurled his bell on that day when the Angel of the Burning Bush granted his prayer "to be the Judge of Erin on the Last Day." For Erin could not trust any other judge of quick and dead. Deities who have ecclesiastical systems, or solar systems, to attend to, may linger as names on the lips, but not reign in the hearts of a people scarred by centuries of oppression and contempt from the nation most favored by such deities. The God of Ireland is not the God of England. The Irish are the Celtic Jews;

with a Jewish faith, intensified by residence in their Land of Promise, they look back to their Golden Age when their guardian deity walked with the patriarchs and prophets of Erin. All the wondrous isles to which St. Brendan, the Celtic Odysseus voyaged, are gathered in the Erin of Patrick, with its emerald fields, crystal lakes, happy villages, and grand monasteries distributing health and wealth through the land. It is a lost paradise; a Saxon serpent destroyed it; but the Irishman believes he will regain it by the blessing of his Celtic Messiah, St. Patrick. That which never existed cannot be regained. The time has gone by when a tribal victory can be gained in the highway of civilization. The Irishman who clamors against English oppression, and votes against the equal right of the negro in America and of the Secularist in England, has not "hitched his wagon to the star" destined to ascend. The best service of the Fenian, the supplanted landlord, is indirect; he is a mirror of the English landlord who has supplanted him, and whose equal violence is systematized in the forms of law. It is clan contending with clan. The English and Scottish common people are slowly comprehending this; and behind all expedients of the hour, there steadily advances the movement for land-nationalization,—the *baculus Thesu* turned to a Golden Rod that shall swallow all the rods and the serpents that plague these fair islands.

MONCURE D. CONWAY.

BOARD OF TRADE MORALITY.

A FAMILIAR example of a corner in grain is seen when a clique of merchants have bought up so many of their fellow merchants' contracts for future delivery, and at the same time have gained control of so much of the grain actually in hand, that those who have made the contracts are unable to buy at the price stipulated when the grain is deliverable. A "squeeze" results, and the cornered merchants must pay to the clique the difference between the price named in the contract and the price current at the time prescribed for delivery. The sum thus paid, less the loss that may arise on the sale of the "cash grain" purchased while sustaining the corner, constitutes the profits of the corner. While the contracts were out, those who had issued them were interested in keeping prices down, and were "bearing" the market. Those who held the contracts would naturally "bull" the market. The former would spread before the public all evidences that the supply was in excess of the demand. The latter would labor to prove that demand exceeded supply. The rise in price incident to such a corner would have a natural tendency to cause an inflow, from the points of production, of large quantities of the article cornered, into the point of distribution, and to stop its export or shipment. Both these influences would swell the immediate supply, thus tending to "break" the corner, and send the price below the figure named in the contract. These influences would have to be counteracted by the "bulls" buying promptly all incoming grain, and all "futures" offered, to run down the market. This is the perpetual battle which determines the daily and hourly quotations of grain. The conflict of these rival hosts gives rise to the uproar and bedlam of the grain exchange.

If the inflow of grain, or the abundant capital and confidence of the "bears," or the removal of some cause of scarcity, such

as war, drought, floods, bad seasons abroad, or other cause, break the corner, then the prices fall, the cornering clique lose, and pay the difference.

The merchants who have issued agreements to take wheat in future have "gone long," those who have issued the agreements to deliver have "sold short." These futures bear a relation to the actual grain on hand, like that which a credit currency bears to the coin in which it is redeemable. They may be many times greater in quantity, and they can be dealt in with a rapidity and dexterity unknown in sales by inspection and delivery, or by sample. It is this tendency of the futures to an exaggerated volume that makes corners possible, just as the tendency of banks to inflation may, under certain circumstances, cause suspension of redemption.

"Options," "privileges," or puts and calls, cut a subordinate figure, and, in an economic sense, none whatever. They are the mere purchase of "refusals," as they would be styled in real estate and other trades. Since the legislatures and courts have condemned them, they have ceased in Chicago, except as after hours a dealer may for a small bonus buy the privilege of putting on another 10,000 bushels of October wheat, or *vice versa*, of calling on him for it, in which case it is a mere debt of honor to the close of the next day.

To prevent corners it would be necessary to confine the purchase and sale of grain to that in sight and deliverable. This would preclude all foresight and prescience, and forbid any standard of prices, admixture of the grains of various owners, and any selling of grain by grade. Corners become inevitable the moment forecast in grain dealing is made possible.

They are not necessarily preconcerted nor intentional. If a speculator thinks, as Keene did in 1879, that a wet season in England will send wheat up, after harvest, to \$1.35, and he therefore, before harvest, buys 5,000,000 bushels at \$1.10, deliverable in October, and if Chicago speculators think Keene has overestimated the potency of British dampness, they may make a rush to sell him all he wants. He buys to protect the price at which he has already bought. His own purchases run up the price toward the figure at which he aims, and seem to justify his forecast. He buys up to 15,000,000 bushels, all that the Chicago elevators will hold. He buys at \$1.15, and all the way up to \$1.35. He has, therefore, two chances of loss. The small quan-

tity he has purchased — 15,000,000 bushels — is a mere bagatelle in the wheat market of the world, the lowest American production being 380,000,000 bushels. If he has mistaken the effect of British dampness, he is gone. The wheat market of the world is too big a thing to be cornered, unless it corners itself by a short supply. October will show whether he acted with prescience or presumption. If with prescience, wheat will not rush in, and the price will stand. If with presumption, it will break. His puny 15,000,000 bushels are powerless against the 800,000,000 bushels which he doesn't hold. His one chance of profit is the sum he squeezes out of those who have "sold short" on his "futures." His two chances of loss are that he must himself sell out much "cash wheat" at a decline, and that prices may never reach the figure at which he has aimed.

Visitors who look at the babel of a Board of Trade only to be bewildered by its din and tumult, and whose personal occupations are concerned with but few persons and small sums, stand appalled at the breakneck rate at which fortunes are lost and won in grain, and at the fluctuations of its apparent values. It matters not whether the article dealt in be the relative values of gold and paper, or grain, cotton, stocks and shares, consols, rentes, bonds or petroleum: they see in the transactions one element which is present in gambling, viz., sudden and immeasurably vast gains and losses. To see the utilities of such transactions, requires a profounder insight into the methods and harmonies of trade than they can be expected to have. They denounce the entire practice as gambling, and forthwith organize some form of campaign for its abolition, or at least stand ready at all convenient times to denounce it on ethical grounds.

The only standard by which we can test these contracts is that of utility. Do their benefits outweigh their mischiefs? Are the complaints against them founded in want of information and want of thought? If so, they are beneficent; and if beneficent, then in every ethical analysis they are right. Hostile legislation cannot make them wrong, and is very likely to demonstrate only its own futility. The advantages of future contracts in grain, founded on the system of grading grain in bulk, and issuing warehouse receipts for certain quantities of certain grades and buying and selling these receipts, as compared with the only alternative system of selling grain

by sample, or on view, are so great that it is not too much to say that to provision the civilized world, without the aid of such mechanism, would be found hardly less difficult than to transport to market the world's food material without the aid of railways.

The first function of this mechanism is to fix an authoritative price for grain, which is telegraphed every morning to all parts of the world, so that every producer and purchaser gets the quotation with his morning paper and as often during the day as he wishes. This service imports into the production and transfer of the commodity a certainty, rapidity, and economy which contrast strongly with the expense of finding out values, the confusion, imposition, chicane, overreaching, and fraud incident to the trade in the various goods which can be sold only by sample or present view, without grading, or any of the means of fixing a price which pertain to the trade in grain.

Mr. James McCreery, a leading representative of the New York dry goods trade, testified before the Tariff Commission :

"I have been engaged in the dry goods business thirty-six years, twenty-nine years on my own account, and during that time have imported large quantities of goods. Yet I find it extremely difficult at the present time to tell within ten or fifteen per cent. what is the real value of fine goods. I go to Europe frequently and spend two or three months at a time there purchasing goods, and yet I find it difficult to come any nearer than I have stated to the value of certain goods."

There will often be from ten to thirty per cent. difference in the price of goods of the same value between different dealers in the same city, in clothing, furniture, dry goods, works of art, carriages, books, watches and jewelry,—in short, nearly every commodity whose price, or the price of whose immediate raw material, is not fought over and settled between two antagonistic sets of speculators on some Board of Trade. Yet every farmer and manufacturer knows daily, as to grain, exactly what Mr. McCreery cannot discover, by spending three months in Europe, as to dry goods. They know not merely within fifteen per cent., but within one-eighth of one per cent., the exact selling value of every variety of grain or provisions, cotton, petroleum, government bonds or railway shares, in any and all the markets of civilization. They know that millions of dollars are staked in behalf of a rise in price, and an equal number of millions in

favor of a fall, and that the actual price quoted is the precise point at which these millions balance. They know that the published quotation is one not fixed by the arbitrary determination of any one dealer, but by the aggregate verdict of them all. The grain baron who knows to a fraction the amount of grain in sight or coming, and who stands ready to buy by the million bushels, and the ostler who invests five dollars in a "bucket shop" on a point, or for luck, are both represented in that quotation, as the attractive forces of the mountain and the pebble are felt in just proportion to their weight in every moment of the earth's diurnal revolution. Hence, throughout the world, all who buy or sell trust to that quotation as their standard, and sell within half of one per cent. of it, allowing for freights and charges.

If there were fifteen per cent. of uncertainty as to the price, the producer would probably lose twelve per cent. of the fifteen. This twelve per cent. on every sale is a probable estimate of the value of the Board of Trade to the farmer. But if grain had to be bought by sample, on personal inspection and delivery, it would require an incalculable increase in the number of grain merchants and in the quantity of capital required to handle it; also in the space required for storage and in the cost of transfer, a much larger number of buyers and sellers, and a proportionately obstructive tax in the shape of commissions on the production, trade, and consumption, all of which would result in giving the consumer less for his money. The customs of trade are forced upon traders by their economy, and because he who falls in with them does more for less cost than he who refuses to accept them. Hence, every quirk and "wrinkle" in the grain trade is an economy of capital, time, or labor.

The intrinsic difficulty of fixing a value upon wheat, cotton, or petroleum, is as great as to do the same for dry goods, clothing, or jewelry. In the absence of boards of trade, not only would the margin of doubt and variance as to values be at least fifteen per cent., but a doubt or variance to this extent would check production probably to the extent of forty per cent. Such a service to production places a gulf between the strifes of the Board of Trade and gambling, as wide as that which divides plowing or reaping from faro or three-card monte.

"Futures" and "options" render a second service to commerce in steadying the market as between different dates, which indeed

is the logical sequence of their operation in imparting uniformity, throughout the world, to the prices at which grain is sold in different places, and by different persons, at the same time. The ultimate criterion which determines the validity of prices is the ratio of the supply to the demand. The speculator who can neither be successfully cornered himself, nor beaten on a corner when he forms one against others, is he who judges rightly concerning this ratio. If the normal consumption of wheat for the population of the United States be five bushels per capita per annum, while the surplus which Europe can take at \$1 per bushel is 200,000,000 bushels, an American wheat crop of 550,000,000 bushels presents a surplus of 100,000,000 bushels of supply over demand. Hence, the price must go below \$1; and he who combines or "bulls" to force the price up to \$1.10, or even to hold it at \$1, is simply presumptuous. If he offers to take wheat at those rates for any considerable period of time, the interests of commerce and the rights of consumers require that he shall be "squeezed" and, if he persists, ruined, as a punishment for fighting against natural law. In the case of the Keene wheat deal of 1879, the proof is now clear that he operated against the natural law of prices, by underestimating the capacity of the American supply rather than by overestimating the extent of the English deficiency. By expanding our export of wheat from 152,075,000 bushels in 1878-9 to 176,426,000 bushels in 1879-80, and our export of corn from 79,031,000 bushels to 103,450,000 bushels, with a like increase from India and elsewhere, the deficiency was filled without any serious rise in price. Hence his corner broke. So of the recent McGeogh lard deal. McGeogh assumed with lard at eight cents that it would go to eleven or thirteen. But the sources of supply for lard are almost inexhaustible, and with lard at nine or ten cents, hogs could be transformed into lard faster than he could pay for them. Hence his attempted corner failed, the farmers meanwhile getting good prices, which came wholly out of McGeogh, and the Board of Trade crushing his presumption in the interests of consumers of lard. There is no more chance in the operation of the law of supply and demand than in gravitation. He who buys or sells, therefore, with an adequate expert knowledge of the conditions which control prices, plays less a game of chance than he who builds his mill by a stream and expects its waters to turn his wheels and grind his grist. The minimum of losses

occurs to those who combine the best knowledge of the sources of supply and avenues of demand with the shrewdest sense and judgment as to all the collateral causes which concur to modify, qualify, and retard this main force. If the rise and fall of prices were determined by blind chance, or by causes as impossible to foresee as the deal in cards or the throw in dice, then to invest with reference to them would be gambling. If the money invested in margins on the purchase of optional grain contracts were of no utility in commerce, except to indicate the owner's faith in a certain course of the market, then the transaction might be classed with bets. But the aggregate funds invested on either side in grain options do, for the time, hold the market to its price, and constitute the investor a part owner, vested or contingent, in the aggregate stock of grain on hand. If he has invested on the "bear" side, then his little \$5 or \$100 lends its featherweight to depress prices and increase the export. If he is on the "bull" side, then he is stimulating the farmers to sell, and is checking the export. Both are part owners, vested or contingent, of the grain on hand. It matters little whether one man goes into the market with \$10,000,000 or 100,000 men go in with \$100 each, or 1,000,000 men with \$10 each, if they invest on the same side of the market and with a like sagacity, a like conformity to the law of prices, and a like pluck and reserve of capital behind them. On what data can we base the assertion that the influence of the smallest sum on either side of the scale is lost in determining the quotation or in influencing the movement of grain? If on none, then, in an economic sense, this utility distinguishes the investment wholly from any sort of bet.

If the ratio of the supply to the demand be such that wheat must go up, the sooner that is known, and the greater the number of persons to whom it is known, the more gradual will be its rise, and the more evenly will the profits of the rise be diffused among all the holders of grain. But if the rise is factitious, or its grounds fallacious, then the sooner the bubble is pricked the better for all. In the main, the whole capital invested in grain resists false rumors, false conclusions, and false judgments as to prices, and, in the main, the daily losses on the board are the penalties paid for misconceiving the market, an error which, if allowed to run on, tends constantly to more violent fluctuations in prices and to greater individual losses.

A third service performed by futures is to effect a movement

of capital from the manufacturers and consumers, through the grain board, to the shippers and farmers, in advance always of the consumption, often of the transportation, and sometimes even in advance of the complete production of the grain. In such case, these futures perform the same function that drafts, drawn by a consignor on a consignee against goods shipped and *in transitu*, perform in commerce. They advance the capital of the consumer to the producer on the credit of the shipment. If an Eastern manufacturer desires to know the price at which he can supply himself with wheat from four to six months hence, as a means of imparting firmness and safety to his own operations, he buys a "future" authorizing him to call for grain at the periods desired. The commission merchant, before selling the future, protects himself by a purchase at such a rate as to leave a fair profit. If his purchase is based on contracts with farmers, as it must be, directly or indirectly, if it calls for an article not yet in market, then the margin advanced by the manufacturer passes through the commission merchant to the farmer, and the case is essentially as if the latter had shipped directly to the manufacturer and then drawn a draft against the shipment.

Formerly, in the case of cotton, the means advanced in London and New York on these "futures" found their way to the planter himself in time to assist in the marketing, and even in the production of the crop. In the older of our Western states the farmers are generally too "fore-handed" to desire any advance, or to put a price on their crops, until they are ready to ship. But on the extreme frontiers where men are handling a great deal of land with little capital, it is still done. "Cash paid for wheat," the invariable sign throughout Western towns, indicates that the stream of capital which flows backward from the manufacturing consumer to the producer, is ready to meet the farmer everywhere at his door, and from thence to float the golden harvest into the market. If it were possible to reduce all sales of grain in Chicago to sales accompanied by actual delivery, then wheat could only be paid for in cash in the country to the extent of the surplus cash of the commission merchant who purchases. This would generally be *nil*. Hence the legend of the wheat buyer in the rural towns would be "Wheat bought on one to three months' time." The cash for the various commodities not dealt in by futures or on boards of trade, such as iron and steel, clothing, furniture, books,

jewelry, dry goods, etc., does not reach the producer until three or four months after the product leaves his hands. The same was true of the grain trade before it was handled by boards of trade, whose inseparable incidents are the blending of all shipments into one graded bulk, the issue of certificates for the grain as graded, future contracts calling for these certificates, margins, and finally corners.

It may be conceded that these benefits cost. All that has value in civilization costs. Railroads cost in loss of life. At times, banks have cost, until the most popular thing a demagogue could do was to oppose banks. Ocean steamers cost in heart-rending calamities. Government, freedom, law, all cost. It is needless to inquire, therefore, whether it is more true that boards of trade encourage the gambling spirit, by sending men whose nerves are exhausted by a whole day of feverish gains and losses in corn, to seek a continuation of the like excitement in a night of faro; or whether they divert from mischievous into useful channels the propensity for the fierce strifes and feverish gains of the play-room. It is barely possible they may so wed the most dangerous of passions to utility as to make it the faithful servant of the world's best good. A class of contracts which perform such services to commerce, which promote the production of the staff of life and cheapen bread and provisions throughout the civilized world, whose profits rest on economic law and not on blind chance, which give equality and firmness to the prices they are charged with disturbing, can only be belittled into bets or likened to the gaming table, by those whose knowledge of business is that of children. Their cost, if the account of their benefits have a debit side at all, is not to be placed in comparison with their beneficence.

The country has recently witnessed with dismay the entrance into the lists of a bold trooper, the Chevalier Henry D. Lloyd, who has ridden up and down through the crowded marts of the grain exchange, clad in the full armor of a financial reformer, with visor down and lance at rest, wearing spurs as big as mill wheels, and has gored and charged so furiously to the right and left with his bare bodkin, that any man who hereafter buys or sells an option in grain will certainly wish he had been robbing an orphan. The charm of Mr. Lloyd's style lies in the trick of granting you all the facts essential to your acquittal on any one accusation, while overwhelming you with such a multifarious hoard of new and unproved accusations, and with such

a vigor of pathos, denunciation, epithet, and entreaty, that before a hasty court, like that of public opinion, one feels doubtful whether it may not be necessary to send for the priest before he has time to send for his witnesses.

Nothing could be more satisfactory than the candor with which Mr. Lloyd seems to admit the beneficence of the Board of Trade's work, before proceeding to ask sentence of death against its promoters, because the fingers of the children are burned with the sparks that fly from its anvil. He concedes that, a hundred years ago, men had to fight against the popular sense of right for the privilege of buying grain at all to sell again, for the "popular sense of right" then said that every man who buys grain to sell again adds his profit to its price, and therefore necessarily makes bread dear. He concedes that the "popular sense of right" a hundred years ago was a very ignorant affair, and charged the agency of the middleman with making bread dear, when in fact the middle-man was doing more than any other to make it cheap. After thus showing that the "popular sense of right" of a century ago was an uninstructed idiot, utterly incapable of even thinking soberly about the grain trade, he prescribes, as a cure for the supposed evils of the present grain trade, a system of national regulation by this same "popular sense of right," *i. e.*, by a submission of questions, which they have no means of comprehending, to a general convention of the non-experts in Congress assembled.

Mr. Lloyd styles Boards of Trade vast "establishments for the manufacture of prices,"—"concentrations of news, capital, and middle-men, in a focus,"—"legislatures, whose enactments are prices," and "more than negative registers of prices determined by a conflux of forces external to them." In short, he looks upon them as clocks which, at most periods, may merely record the time, but charges that they once in awhile step outside their province and actually create the time. He thinks they are barometers that once in a while create the storm which they ought only to indicate. If this be true, it is a grave offense; I regret that Mr. Lloyd, with the great resources at his command, disdains to perceive that the proof of one such accusation would make him immortal in philosophy, for it would establish that there is a portion of the universe not governed by law.

The means of proof are plain. He has only to show that, in one instance, when the supply exceeded the demand and economic law required that prices should fall, a corner formed to send

prices up reaped a splendid harvest of profit, in spite of the ineffectual efforts of farmers to forward their crops in time to break the corner, and in spite of the efforts of news collectors to prove to capitalists and dealers that the corner was fighting against economic law.

A survey of all the facts showing that, in the case of one distinct corner, those who relied on "brute wealth" were able to speculate against the economic law (that excess of supply over demand must reduce, excess of demand over supply must raise prices) would be worth whole columns of verbal efflorescence and camp-meeting rhetoric. Before we get up an indignation meeting against Jehovah, because the sun stood still for a day to enable the Israelites to slaughter their enemies, let us settle the little question as to whether the sun did stand still.

Mr. Lloyd is not specific about dates. He speaks of a corner in 1879-1880-1881 and 1882, although he tells us there are corners all the time. Somewhere among these we are to locate the following incident:

"At one time their wheat was piled up in the elevators and on the railroad tracks, intentionally stopping the way so that no other wheat could be got to market by the farmers and dealers. Wheat was refused to exporters at prices they could afford to pay. The English buyers went to Bombay and Calcutta; and the East Indies, which sent their first sample to Liverpool less than ten years ago, have, in consequence, taken a place next to us in supplying the British market. During the winter, four hundred vessels lay for months in New York harbor, the owners pleading for wheat even at ruinously low rates (of freight). Many of them ran into debt, and the majority of them had to sail away to seek cargoes elsewhere."

All this is breezily connected by Mr. Lloyd with the date of 1879. But alas, in 1879, instead of the steamers rotting at our wharves without cargoes, by reason of the grain being piled up in Chicago, we exported by far the largest quantity we have ever exported in any one year, being 176,426,000 bushels of wheat, and 103,450,000 bushels of corn, or fifteen times more than all our Chicago elevators could hold. If the wheat was piled up and blocked in 1879, it must have been for lack of cars and vessels to take it away as fast as it was forwarded. Our exports of that year compare with those of other years as follows, from September 1st to August 31st of each year:

	<i>Wheat, bu.</i>	<i>Corn, bu.</i>
1882-1883.....	125,402,000	45,114,000
1881-1882.....	125,705,000	26,290,000
1880-1881.....	159,975,000	83,370,000
1879-1880.....	176,426,000	103,450,000
1878-1879.....	152,075,000	79,031,000

A careful examination will show that this and the crisis in railroad freights, which immediately followed, occurred late in 1881, after the short crop of that year had made it apparent not only to our shrewdest grain buyers, but to all the world, that we were short by 700,000,000 bushels, as compared with the crop of the previous year.

It was in this winter, following the short crop of 1881, that Mr. Chauncey M. Depew testified in other language, before the committee of the New York Legislature, to the same supposed "fact" which Mr. Lloyd is above describing. Mr. Depew said :

"At the present time the grain at Chicago is controlled by a combination which has so raised the price that it is selling for less in Liverpool than here, and the encouragement to the grain interests of Liverpool has been such that new sources of supply have been discovered which will in future compete with this country."

Evidently Mr. Lloyd and Mr. Depew are "cornering" the same fact, and Mr. Depew's testimony fixes it as an event occurring while he was testifying, which was in the winter of 1881-2, after our short crop of 1881. In fact, this was the only occasion on which wheat vessels left our ports in the manner described without being able to get cargoes.

Did the state of the supply and demand justify the high prices in Chicago, and the consequent withholding of wheat and corn from export? Let us see. The corn produced in 1881, in the United States, had been only 1,194,916,000 bushels, as against 1,754,861,535 bushels in 1880—a falling off in Indian corn alone of 559,945,535 bushels. Our total export of corn in 1880, with an abundant crop, had been 98,169,877 bushels, or only one-fifth as much as the shortage in the crop of 1881. We must either have imported corn from abroad, or used less corn than the year preceding by nearly 500,000,000 bushels. And yet both Mr. Depew and Mr. Lloyd pathetically assure us, with every variety of rhetorical cadence, that any rise in corn on this account was due to manipulation and artificial "cornering," which should be suppressed by national regulation. Hence, if we had had a board of national regulation, and Depew and Lloyd had been members of it, they would have concurred in sending corn out of the country in the year 1881, although the shortage in our crop was then five times greater than our usual annual export. Surely if the design of these gentlemen had been to prove that any attempt at national regulation, so long as the present degree of capacity for misapprehension concerning the economics of the grain market

lasts, would be a public nuisance, they could not have made their testimony so emphatic by design as they have done by inadvertence.

Our wheat crop in that year had fallen from 459,479,505 bushels in 1880, according to the census, to 380,280,000 bushels in 1881, according to Bradstreet's. Here was a decline in our production of 79,199,505 bushels, while our export of wheat and wheat flour in 1880 was 159,264,214 bushels, thus showing that the decline in production would compel a cutting down of one-half in our export, without allowing for the additional diminution of wheat export which would necessarily be caused by shortage in the other cereal crops.

The theory that the Chicago Board of Trade developed the Indian supply of wheat would, if true, defeat the charge contained in Mr. Lloyd's caption of "making bread dear." It would show them to be the most efficient of all philanthropists, as, in fact, on other grounds they are in making bread cheap. The charge contains more poetry than truth. The English had built 2500 miles of canal and immense railways in order to develop this wheat culture in India, beginning twenty years before the Chicago Board held on so tightly to the crop of 1881. We think the English did it.

Nor do we admit that the Board made bread dear in England by holding on to the crop of 1881 for a time. For the ruling English price was 5s. 11d. per bushel in 1881, or \$1.47. The price American producers got for it, according to Mr. Nimmo, was \$1.19. If we let it go 26 cents below the English price, then Mr. Depew's guess, that it was higher in Chicago than in Liverpool, did not define the average but some exceptional fact. Meanwhile, the American farmer got for the export of 1881, which was 118,000,000 bushels, \$1.19; whereas, for the larger crop of 1880, he got only 95 cents, and for that of 1882 only \$1.03. The difference between what the Board of Trade gave him for the exports, and what Depew and Lloyd would have given him, was therefore 24 cents a bushel, or say \$28,320,000.

Instead, therefore, of denouncing the natural and beneficent workings of enlightened self-interest which detained the wheat, corn, and provisions in this country, through the "speculations," and with the capital of the Board of Trade, gentlemen so enlightened as Mr. Depew and Mr. Lloyd should long since have discovered their utility. Had the wheat and corn been permitted to go abroad in concession to their demands, they would only have

been brought back by the prices here being carried up to what the tearfully rhetorical class of weeping economists would call the "famine pitch."

Mr. Lloyd concedes that a great many, perhaps a majority, of the farmers believe that, to them, corners are beneficial. Test, for once, the validity of their faith in the case of this particular corner so feelingly denounced by Depew and Lloyd. The Department of Agriculture reports that, for the seven abundant crops of 1880, viz.: corn, wheat, oats, barley, rye, buckwheat, and potatoes, an aggregate of 2,885,853,071 bushels brought only \$1,442,559,918, while for the same seven short crops of 1881, aggregating only 2,175,175,064 bushels, the farmers got \$1,570,248,541. In short, for a crop less by 710,677,007 bushels in 1881, the farmers got more by \$127,688,623 than for the more abundant crop of 1880. Hence the farmers were not far astray in this instance. Mr. Lloyd gracefully admits that the Board of Trade "mobilizes and cashes the crops of the Mississippi valley." He could hardly say more in behalf of the sun which causes them to germinate and fructify. It "brings the capital of the Bank of England and the Hopes of Amsterdam to meet the farmer when he drives up to the country station with a wagon load of grain to sell." If so, it does well. Very few missionaries or professional philanthropists, who make a living by doing good with other people's money, could do better.

Of "futures" he says that it is by their agency alone that a commercial crisis is prevented every year, and that Senator Hoar's proposal to stop trading in futures, if enacted, would produce an annual panic. But Senator Hoar, who comes from a State where no grain is dealt in, is the most intelligent of the national grain-sale regulators, as Mr. Reagan, who comes from Texas, where there are few railroads, is the most vigorous of the regulators of railways. It is the surplus spinsters in Massachusetts who are most zealous to regulate polygamy in Utah, and the nullifying planters of South Carolina, who never bought, used, or saw a pound of pig-iron, who are most alarmed about the duty on that article, which none but iron manufacturers pay.

It was John Brown, who had never seen a slave, nor a master, nor a plantation, who at fourteen years of age saw a free negro whipped with an iron rod by a citizen of a free State, 300 miles away from the slave line, and forthwith swore a

great oath that he would kindly deliver the entire slave race, of whose condition he knew nothing, into the condition of the free negro, whose suffering excited his pity, without maturing his feeble logical faculties. Thus it is that the genius for national regulation always inspires people to begin with those matters of which they know least, and to abhor all explanation of things which if they come to understand they could not denounce. Thus it is that national regulation may often mean the national bedevilment of complex questions, through the forcible application to them of the crude notions of the presumptuous non-experts, whose only qualification for dealing with them is that they live so far away from them that they have no means of discovering the utilities that lie hidden under supposed evils, or the destructiveness involved in their fancied remedies. Mr. Lloyd should be cautious how he recommends that the planters of Texas and cotton-spinners of Massachusetts receive national license to hurl a brick or a bowlder at the delicate machinery of our Western grain trade in the name of reform, when neither of them would know how to go upon the board and buy 10,000 bushels of wheat.

Mr. Lloyd says, "These corners put prices down when the farmer wants to sell, and put them up when the miller needs to buy." Surely this is not instructive. It is not merely "*sans-culotte*"-ish; it is "sand-lot"-ish. It is simply rant. We have farmers whose single crops of wheat alone range at from 50,000 to 1,000,000 bushels. I have known farmers in Illinois who, twenty years ago, would hold their crops of maize three years to get their price. Farmers, therefore, choose their own time for selling, and take the whole year to choose from. Mr. Lloyd admits this elsewhere, in saying of the Board that, "with all its faults, it is the finest piece of mechanism commerce has yet invented, and without it the American farmer could not retain his command of almost antipodal markets." If it is the American farmer who commands the Liverpool market, then the market cannot command the farmer.

Mr. Lloyd thinks it a grievous hardship that the Board of Trade should be left by the courts to be a law unto itself, and especially since the tribunals established within the board may include members who have interests in the very disputes they are called on to decide.

He assumes that in the courts there would be a total escape from these evils. Far from it. Those who have had most to do

with courts of law best apprehend the extent of their unsatisfactoriness. The sphere of their actual usefulness is extremely limited. They are the surviving relic of the old effort to rule society by organized force as a substitute for anarchic individual physical force. But trade cannot be forced. Its inherent nature claims freedom—not necessarily the freedom of foreign producers to trade in our markets untaxed, a travesty on true freedom of trade, but freedom from the coercive intrusions and blunders of non-experts in trade, freedom to follow the guidance of interest and the inducement of profit, freedom even to err and blunder, and to pay in losses out of one's own pocket the penalties of the error.

A church, a Masonic organization, a base-ball club, a theatrical company, a manufacturing establishment, and even a family enjoys a system of law of its own as distinctly removed from the interference of courts as is that of the Board of Trade. All these have a sphere of interior administration, in which it may be said they take their stand outside the law. A membership in either of these might come to have a pecuniary value. Yet it would be the height of absurdity for a court to attempt to sell such a membership for debt, or to enforce the election, by the other members of such an organization, of any new member whom a retiring member might desire to substitute in his stead. The abolition of just such a system of selling commissions in the British army and navy, forms one of the whitest plumes that grace the helmet of Gladstone as a reformer. But Mr. Lloyd weeps because what has just been abolished in the British army and navy as an abuse, cannot be introduced on our boards of trade as a reform. Board of Trade men cannot be more ignorant of law or of the rules of evidence than lawyers, legislatures, and judges generally are of the economics of trade and business.

Shall I stop to discuss the appalling assumption involved in Mr. Lloyd's title "*Making Bread Dear*"? Must economic teachers, like Spanish bull-fighters, forever enter the arena of economic discussion with these socialistic red rags in one hand, as if society were a mad bull that must be made to glare with rage before the lance's point could let in light upon his brain? Will the time never come when such irritating captions will cease to be placed over an unproved indictment?

VAN BUREN DENSLOW.

HISTORIES OF THE FRENCH REVOLUTION.

THE most momentous epoch in all modern history has found, as was natural, a continual series of historians; but, up to the present time, it has found no one that is finally sufficient. Almost every writer in France, and most of those out of it, who have given us histories of the Revolution, have some theory to maintain, some party to support, or some hero to glorify. A party view or a special view of this complex series of movements is, of necessity, a wrong view. To have a theory about the Revolution is as hopeless a hobby as to have a theory about Shakespeare, the Catholic Church, or the female sex. Parties have not much more to do with the Revolution than they have with the course of civilization. The drama of it has no hero, no moral, and no definite catastrophe. He who knows the Revolution best will be the last to go to it for heroes, ideals, or examples.

I can remember at college that a foolish youth proposed to discuss at the debating society "If the French Revolution were a justifiable proceeding?" And thereupon a fantastic, but most acute scholar, asked him if he thought the fall of man a justifiable proceeding? There was a profound meaning in his grim jest. There is about the French Revolution that precise character of portentous moment to the human race, of utter inevitableness, of rash self-confidence, leading us through generations of suffering to a higher life by heroism, just as there is about the old-world myth of the fall of our first parents from Paradise. It launched us, for all ages to come, for better or for worse, on that career of toil, self-improvement, and ultimate regeneration, much as the imagination of Hebrew prophets of old saw man committed to work out the problem of his life, in the old books of Moses. The Revolution is the story of man's civilization in its final problem, just as the fall represented to the first religious

thinkers the crisis of man's earliest answer to the first great problem of his life.

What an epoch has that Revolution been in human history ! How completely has every form of our social life changed since the famous opening of the States General in 1789 ! The pre-revolutionary epoch is not older than some men still living, and yet how distant it is from us morally and socially. The ancient regimen is as far from us as the Middle Ages. Read that brilliant installment of a life of Fox, by Mr. Trevelyan, and reflect on the gulf which separates our society to-day from theirs before the Revolution. How coolly men of rank assume the monopoly of government ; how profligate, how unblushing, how reckless is the career of the high-born and the wealthy ! From the fall of the Roman empire till the proclamation of the republic (*i.e.*, for twelve centuries) "gentlemen," as they loved to be called, had gone always armed, at least when in full dress. M. Grévy is, perhaps, the only ruler of a great European state who has never worn a sword in his life. An aristocracy was the basis of society ; privileges of birth and of landed estates were recognized in all countries of Europe. Law, manners, industry, church, state, in many things of external form, and in some of internal substance, were mediæval. The interval which separates us from them is like that which divides the world of antiquity from the world of Christendom. Well might Auguste Comte make it in his Calendar the date of a new era.

When we come to see into its depths, the most inadequate view of the Revolution that we can form is, that it is a mere outbreak, an insurrection, a period of anarchy between two regular periods of calm. Again, one of the most favorite and yet shallow ideas is this : That it had some specific cause—that it was caused by the corrupt state of the monarchy or of the aristocracy, or by a vicious system of government, or a vicious land system, or by popular ignorance, or by skeptical philosophy, or by the want of local self-government and of parliamentary institutions. All of these things contributed to it ; each formed one of the many causes, as did fifty other things. But no one of them was the single cause.

Next to seeking for a cause, when cause there is none, one of the most admired fallacies is the seeking for a beginning and an end to the Revolution. Some make it begin with the States General in 1789, others with Louis XV. and Voltaire. Some go

back as far as Louis XIV. and the building of Versailles. In truth, the Revolution is the outcome of forces which had been gathering in intensity for centuries, of which the Renascence of the fifteenth century, and the Reformation of the sixteenth century, and the revolutions and rebellions of the seventeenth century were all parts. M. Michelet, alone among historians, sees this—for he begins his history of the Revolution with Dante and Huss, the thinkers of the fourteenth and fifteenth centuries. And as the Revolution had no precise beginning any more than modern society had any precise beginning, so the Revolution has had no precise end. Its end is not yet arrived. We who have seen the insurrections in Paris in 1830, in 1848, in 1871, who remember the portentous surging in Europe of 1848 and 1849, who have seen German Socialism, and French Red Republicanism, and Russian Nihilism, who see to-day a sister island of our own people in a state that reminds us of some of the gloomier years of the last century,—how can we believe that the Revolution has yet found its end and its normal issue? There could be, I think, no more instructive page of history than this,—it is a page yet to be written. I mean that whereon should be drawn out the connection between the taking of the Bastille, in 1789, and the European movement of 1848 and the European movement of 1871. It is a page that has yet to be written, but the thought of it and all that it will contain may prevent us from dreaming that the French Revolution is ended.

The true reason why the French Revolution is not ended is this—that it was far more constructive than destructive, that permanent changes grew up amidst all the confusion and bloodshed such as have a large career of development before them. It would be easy to show that the last fifty years of the eighteenth century was a period more fertile in constructive effort, gave us more germs of new social institutions, than any similar period of fifty years in the history of mankind. When we take France, when we take Europe of to-day, and compare them with France and Europe of one hundred years ago, in government, in law, in industrial organization, in popular education, in religious earnestness, in moral standard, in the whole social system, we find the most amazing contrast. And this new social system did not come hap-hazard. It has been slowly built up, out of thoughts, and efforts, and discoveries that were all carefully worked out some one hundred to one hundred and fifty years

and more ago. Truly we may call the Revolution the crisis of modern reconstruction:

“When France in wrath her giant limbs upreared,
And with that oath, which smote air, earth, and sea,
Stamped her strong foot, and said she would be free.”

And now to turn to the question, how, in what books, is this wonderful epoch to be studied? So much has been written about it that, practically, knowledge is in danger of being darkened instead of enlightened. An immense library might be made out of works relating to the Revolution. There are at least a score of formal histories of it, in more or less repute. Unfortunately, a great many of these histories are written, not so much to teach us the facts as to indoctrinate us with theories, usually very one-sided theories, of politics and society, to puff up or, as it is now the fashion to call it, to “rehabilitate” a bad man, to make a hero, to blacken a party, to defend an institution,—in fact, to do us good in various ways, instead of giving us true information about real events. All of these are necessarily wrong. There is no hero in the French Revolution, and no literary skill can read one into it; there is no party, no institution in it either perfectly black or perfectly white, and the grand lesson of all in the Revolution is, not to surrender ourselves to any party.

We may divide the various accounts of this epoch as follows: 1, real narratives; 2, personal gossip, or recollections (and the recollections are very often inventions of the rememberer); 3, historical poems; 4, historical romances, or political diatribes. Unluckily, the narratives are apt to get dull, the personal memoirs rather scrappy and egotistical, the poems extremely unintelligible, and the romances and diatribes extremely mendacious. The best of the plain narratives, I take, beyond all question, to be the history of Mignet. Poems, such as the dramas of Mr. Carlyle and of Jules Michelet, are magnificent works of imagination and of description, but they are to most readers perfectly obscure until they are explained by a mass of prose commentary. Again, if we were to believe all that we find in Lamartine, or Louis Blanc, we should get a very distorted view. Lamartine’s so-called histories are mere historical novels. It is far too little to say that Lamartine never shows any sort of desire for historical truth. His plan is deliberately to prefer

melodramatic effect to reality; an epigram to an authority; a fabulous coincidence to a true date.

We want, to begin with, a plain, unvarnished narrative of these great events, and the best, I say, beyond all question, is that by M. Mignet. It is plain, clear, interesting, judicious, and honest. It takes no side and has no hero; in one small volume it covers about thirty or forty years of the most stirring epoch of modern times; it is translated into English; it is one of the commonest of books. Mignet, however, only just gives us the bare outline; it is little more than a summary—but a very good summary. So far as the general history of Europe and the twenty-three years war is concerned, I do not know that we can do better than go to a work quite as well known, I mean “Alison’s History of Europe.” We cannot honestly say that Sir Archibald has given us a real history of Europe, nor recommend any but a real glutton in books to go to work on the twenty octavo volumes. For a clear summary, perhaps we cannot do better than go to the “Epitome of Alison’s History of Europe,” so far as we need a clear, succinct, and comprehensive history of the great war. With Mignet and Alison as short handbooks we have, at any rate, a plain and lively sketch of all the principal facts. But this is only the skeleton of the matter.

And as to fuller histories we have them, one may say, by the score, each with its own strong feature, each disfigured by some great defect, most of them excessively long, and many of them requiring a body of other books to make them understood. There are in English, for instance, plenty of histories, of which Sir A. Alison’s is the type, which record the Revolution from the point of view of Burke, which with vigorous description and broad color paint the whole story as a villainous insurrection against a gracious king and queen and a gallant aristocracy. Von Sybel is little more than a German Alison, the laborious tirade of a wrong-headed partisan, in which professorial erudition and *gründlichkeit* are, after all, a poor substitute for the readable narrative of the Scotch Tory. The narrative, again, of the French statesman Thiers is clear, brilliant, coherent. There is always an advantage in getting a history written by a man who has helped to make history; and his six volumes have the merit of taking us down from the time of Maurepas to 1799, or about twenty years. The history of the Revolution is not defaced to the same degree by that deliberate purpose of misrepresentation,

by that passion for glorifying France and making a hero of Bonaparte, which defaces the "History of the Consulate." But M. Thiers is always more of the politician and the publicist than the pure historian; and we never feel ourselves in the hands of one of the truly patient investigators of facts; nay, we do not always feel in the hands of a man who is seeking to tell us the truth at all. With all this, for the lucidity of its style, the vigor of its pictures, and the practical grasp on the business of politics M. Thiers's work remains, perhaps, the plainest narrative of the time, and is certainly the one which is most read in France.

A far more really historical work is that by an old political opponent of M. Thiers,—the late M. Louis Blanc. In M. Louis Blanc's "History of the Revolution" we have a real investigation of facts, the patience of the born historian, an immense mastery of at least some parts of the problem, and an insight into the popular part in the Revolution which is almost unrivaled. Far inferior to the book of M. Thiers in energy and flow of narrative, inferior also in the living grasp on affairs of a born politician like M. Thiers, inferior in all the elements of mere popularity, M. L. Blanc stands out immeasurably superior to M. Thiers in the qualities of historical truth. In all that concerns the condition of the people, the democratic organization of Paris in its clubs and the sections, M. Blanc is perhaps unequalled. It is unfortunate that a work of such high merit is on such a vast scale that twelve not very lively volumes are devoted to the events of five years; and it is far more unfortunate (it is worse than unfortunate) that the whole work is ruined by the deliberate purpose to find the hero of the age in Robespierre, and at last to make the history itself a sort of apotheosis of that sanguinary tyrant, whom M. Blanc would have us believe was a gentle and inspired enthusiast.

Those who will seriously make a study of this epoch will go, of course, to the more detailed histories of special periods, such as Mortimer-Ternaux's "History of the Terror," Lanfrey's "History of Napoleon," Taine's and De Tocqueville's account of the Old Society.

A few words as to each of these. Of recent books none, I suppose, has done so much in the way of new investigation as the careful and patient work of Mortimer-Ternaux's "The History of the Terror." But, after all, few but special students of the Revolution will be able to go to these ponderous octavos for

the events of little more than a single year. We lose all sense of perspective if we suffer ourselves to regard the Revolution as a mere apotheosis of the guillotine, as a season of simple terror. Lanfrey, again, who in our day has finally demolished the Napoleonic legend, and has torn the mask from the most astounding impostor and unquestionably the biggest liar in modern history, whose clear and cutting evidence has reduced to its real proportions that orgy of blood and arrogance—the European tyranny of Bonaparte; this book, I say, intensely interesting and valuable as it is, may easily lead us, if it usurp undue space of our reading, to look upon the Revolution as the prelude to the European wars and the instrument of Napoleon, when, in fact, it had twenty other sides as important as that of the war, and hundreds of names who deserve study far better than the great soldier.

No one will understand the incredible condition of that Old Society, out of which the Revolution arose, unless he will study it in the books of Taine and De Tocqueville. M. Taine has piled up with enormous erudition, and has pieced together with singular skill, an array of evidence that brings before us every feature of that old world. But I am not aware that he has substantially added to our knowledge.

The business of a true historian is to see and to think, to look into the past with his own eyes, and to make it live to ours by the light of his own imagination. It is a very inferior task to extract statements from a thousand writers, and then to piece them together into a sort of scintillating Mosaic.

If M. Taine has reduced his picture of the Old Society to a sort of tabulated commonplace book, M. de Tocqueville, in his "*Ancien Régime*," is forever the Finality Doctrinaire of the Revolution. He is the modern Sieyès, superior to the irrepressible Abbé in learning, in modesty, and in good sense, but still imbued with the same conviction that political science is a subject which he has himself finally completed (*achevée*); that its first and last word is self-government, meaning thereby the judicious rule of all persons of culture.

There are two special sides of the Revolution (and they are the two most important of all) which have never received their due consideration, and which, for the most part, do not get considered at all. The political side of the Revolution has been well and even abundantly treated. But there are two things which have

never been seriously worked out. The first is the relation of the Revolution, as a whole, to the vast achievements of the eighteenth century in philosophy and science; the science of the world—physics and physiology—first, and secondly, the science of man and human society. The second of these two things is the relation of the Revolution to industrial re-organization, to the social incorporation of the workmen in town and country, to what we call, for short, Socialism, whether in its agricultural or in its manufacturing aspect. The first of these two has relation to the thought of the past; the second to the industry of the future.

The best popular sketch of the relations of the Revolution to the philosophy and science of the eighteenth century is to be found at the close of Henri Martin's great "History of France." In his chapters numbered 96, 99, 100, 101, 103, 105, he has given us a useful *résumé* of the march of thought in religion, politics, physics, and morals. He shows us Voltaire, Rousseau, and Diderot, and what their influence was on things of the intellect, on the progress of industry, and on the bases of society. Here is the field so little understood by Carlyle. Here we have the soul of the Revolution before us; it is a sketch which every intelligent reader can work out for himself, and the want of it makes so many histories of the Revolution old almanacs of battle and riot.

The second great *lacuna* that I note—the relation of the Revolution to what we now call socialism—is not so easily filled. I know of no book at all complete and competent. Some materials for it are found in the "Histoire du Socialisme," anonymous, printed privately at Lugano. It is useful, as it contains an immense body of documents and manifestoes on every socialist school for a century. We certainly want a true history of socialism, meaning by that a history of every systematic attempt to provide a new social existence for the mass of the workers. In the meantime, we can pick up some hints in M. Michelet's later volumes and in those of M. Louis Blanc, especially in M. Blanc's "Histoire de Dix Ans," 1830-1840, where he gives the story of St. Simon and the insurrection of Lyons. His own books on the organization of labor give the socialist element in the Revolution of 1848, and perhaps M. Lissagaray's work may serve as a history of the commune of 1871. Michelet is the one historian who has given us not only the intellectual and religious elements of the Revolution, but also the heads of its relation to modern socialism.

Unfortunately, the later volumes of M. Michelet are so inferior in power to his earlier volumes, that we get from him on this head little more than hints and suggestions. The only course left to us is to study the monographs which exist of Babeuf, St. Simon, Fourier, Cabet, and Owen, and L. Blanc.

But if we are to study the socialism, on no account let us forget the conservatism of the Revolution. The worst that we could do would be to take a one-sided view of this great crisis. He will know little of it who has not filled his spirit with the Titanic diatribes of Burke and the prophetic denunciations of De Maistre, quite as much as with the thunders of Mirabeau and Danton. No doubt Burke was wrong,—taking all together, and weighing all together,—utterly, immeasurably wrong, in his general judgment on the Revolution; yet wrong as the solution is, he alone has fully conceived the problem.

What Burke is to England and its aristocratic polity, that De Maistre is to France, her historic monarchy, and Catholic Church. As lights and guides in this great *mêlée* we need them all: the conservatives and the reformers, the monarchists and the democrats, the believers and the iconoclasts, all have something to tell us worthy of our hearing. We need Burke to show us the horror he felt at anarchy, De Maistre the grief he felt at the destruction of all idea of Church; we need Michelet's magnificent love of the suffering poor, Carlyle's passionate scorn of imposture, Louis Blanc's unalterable fidelity to the future of the people, De Tocqueville's patient unraveling of inveterate oppression. Of all those who in England and in our day have studied and expounded the Revolution, the most learned as well as the most enlightened guide is to be found in Mr. John Morley. Scattered through his various studies of Voltaire, of Rousseau, of Diderot, of Turgot, of De Maistre, of Carlyle, and in particular his last life of Burke, we shall find the justest as well as the most candid conception of the Revolution as a whole. He is perhaps the only writer, either in this country or abroad, who is able to do justice to all sides, and to all the leaders in due measure, who profoundly sympathizes with the hot tears wrung from the fevered intellect of Burke, and with the hotter tears wrung from the morbid heart of Rousseau; who can honor Voltaire and De Maistre in the same page, and has an enthusiastic conception both of Diderot and of Danton, while not yielding to Michelet or Louis Blanc in zeal for the resurrection

of the people, nor to Mr. Carlyle in aversion to pedantry and anarchy.

But no guides, no historians, and no philosophers will avail us much unless we will ourselves read at first hand, and think on what we read. The true way to read the French Revolution is to go for ourselves to the original sources. No doubt, none but professed students will master the vast store-houses that exist in those two monumental works on the Revolution—the Parliamentary History of Buchez and Roux, in forty octavo volumes, wherein we have the debates and all the public documents, and then the collection of *Memoirs*, by Berville and Barrière, in some sixty octavo volumes. What power of human effort, thought, and feeling lies stored up in these one hundred volumes—as in some catacomb or pyramid, where the dead of a great age sleep. All the fury, all the passion, all the folly, all the hubbub of the Assembly and the Convention, of the Jacobins and the Cordeliers, recorded day by day. We can hear the heroic paroxysm of Danton, the trumpet-call of Mirabeau, the biting dogmatism of Robespierre, the generous emotion of Vergniaud, the hissing venom of Marat. Or turn to the collection of *Memoirs*. We have the wicked wit of Besenval, the courtly gossip of poor old Campan, the wise and keen observation of Bailly, or of De Ferrières, the passionate insight of Madame Roland, the terrific story of the agony in the prisons. No! None but professed students have the leisure to master these. But there are two memoirs which, in part at least, all should know; the two most striking personal records that the Revolution has left us. The first is the *Memoir* of Madame Roland. 'Tis one of the most memorable fragments extant, with its ghastly picture of old France, its photographic insight into the home of a small shop-keeper in old Paris, with its prophetic notes of the first stirrings of the new time, until, as the movement grows in mass, the great historic characters step across the scene, or gather, as it seems, in quiet groups, rehearsing their parts before the drama opens,—Robespierre, Danton, Marat, Vergniaud, Barbaroux. And then she, the daughter of a poor working-man, becomes the friend and confidante of statesmen, the rival of dictators, the superior of Marie Antoinette, the wife of a minister of France, the victim of Robespierre, a state prisoner, till the page breaks off abruptly as the guillotine descends on that fair neck, and severs the keen brain from the untamed heart.

The other indispensable work of contemporary record is found in the famous travels of Arthur Young in 1787, 1788, and 1789. Arthur Young was no genius, but he was a highly competent observer, with an instinct for economic conditions,—honest, intelligent, and possessed of singular opportunities. None but regular students will go through the whole of his voluminous observations. But for one who wishes to know what the Revolution has done, I can imagine no more valuable labor than the comparing these travels of a highly trained English agriculturist, in 1789, with the survey which appeared by Wilson, the other day, just ninety years later, of the same country. But all should read at least A. Young's twenty-first chapter on the Revolution. What a picture of the old-world France it is! Read his account of the haggard men and women, bare and shoeless and stockingless; of the hovels with no glass in the windows, with no light but the door; of the woman whom he talked with near Metz, only twenty-eight, and looking sixty or seventy, crushed by toil and famine. "Ah! monsieur," she said, "*les tailles et les corvées nous écrasent!*" An Englishman cannot imagine, says honest Arthur, the look of the women in France, all feminine appearance crushed out of them by toil, misery, and hunger. Read this, and then go and see that country now, and that thriving peasantry to-day. That was ninety-five year sago. Read his account of the rights of the lords, of the *corvées* (forced labor), of the tenant leagues against the payment of rent, of the *droits de seigneur*,—*droit de silence des grenouilles* (when the lord had a son and heir born, the peasants were obliged to watch all night beating the ponds, so that the frogs should not disturb the baby!). Then, again, how smugglers of salt were flogged, branded, and hung; how weeding and hoeing were forbidden to the peasants for fear of disturbing the young partridges. Read the story of Gordon and Lord Albemarle, and the *Lettres de Cachet*. Read all this, and then turn to the reports of the debates, and read the account of the great sitting of the night of 4th August, when the nobles surrendered these rights,—partridges, frogs, *lettres de cachet*, and all. Read some of Mirabeau's speeches, and Danton's, and Vergniaud's; read a number or two of Camille Desmoulins's "*Vieux Cordelier*" and Marat's "*Ami de Peuple*," the account of the prisons, the trial of Louis XVI., the death of Vergniaud, of Danton, of Condorcet, of Charlotte Corday, of Robespierre, in

the actual debates, or the memoirs of eye-witnesses. Verily, there is nothing out of Shakespeare so tremendous.

I come now to speak of those two books—the histories of the Revolution which, in France and in England, stand out, I think, before all others, different as they are, but both dramatic poems rather than histories; charged with genius, lit up through and through with burning sympathy for all greatness and all justice—the works of M. Michelet and of Mr. Carlyle. Without comparing them for a moment, both agree in this, that they go to the very soul of things, that they present them to us in a series of living dramas. Of all those historians who have studied the Revolution, M. Michelet has the truest sympathy with it and the profoundest sense of its inner meanings. If his historical learning and his artistic genius had equaled that of Mr. Carlyle, we should have had for once a perfect history.

Who does not know that noble masterpiece of English literature, the poem of Mr. Carlyle? Who has exhausted its infinite humor, pathos, wit, dramatic passion, and tragic terror; its boundless fertility of anecdote and suggestion; its profound earnestness, and almost religious fervor? I believe no history in our language, perhaps no history in any language, quite equals it in poetic richness of dramatic art. The death of Louis XV., with which it opens, may read like an act of Shakespeare or a romance of Fielding. The taking of the Bastille, the insurrection of women, the death of Mirabeau, the end of Louis, of Marie Antoinette, of Danton, the pictures of Marat, of Charlotte Corday, of Madame Roland, of Camille Desmoulins, surely these will ever live in our literature beside the greatest achievements of historic portraiture. Such portraits are more than history, for they rank in their realism with the great creations of poetry. They are more than poetry, for those which I have mentioned may take rank with the most authentic and complete records of history.

But great and perhaps lasting as the literary value of this famous book may be, it is as far as any other from being the final and sufficient history of the French Revolution. That great convulsion, as it was said at the time, swallowed up its children, like the oldest of the gods. It certainly was fatal to its chief actors; and it has been far beyond the powers of all its historians. Year by year,—and nearly fifty years have passed since its first appearance,—Mr. Carlyle's Revolution is more and

more felt to be a literary picture, and less and less a historical explanation. It is based on an idea now recognized to be thoroughly inadequate; it is saturated with doctrines for which the author himself no longer retained any trust or hope; and it leads us to a conclusion which all that is manly and true in our generation rejects with indignation. A generation ago the influence of it was great; it is now seen to be a poem, with the vision, the movement, the exaggeration of poetry, but without the one indispensable quality for history, solid historical science and true social philosophy. Historical science, social philosophy! those great discoveries and resources of our age, the *Novum Organum* of the world to be, these our Seer scorns with a truly Runic scorn, a laughter that grows at last intolerably artificial and senile. The whole work is based on a false and narrow assumption; for throughout it the Revolution is treated as an insurrection, an outbreak against tyrannies, shams, and lies, a period of anarchy which left nothing behind it but destruction. Now, the history of our entire nineteenth century is precisely the history of all the work that the Revolution did leave. The Revolution was a creating force, even more than a destroying force; it was an inexhaustible source of fertile influences; it not only cleared the ground of the old society, but it manifested all the elements of the new society. If there is one principle in all modern history certain, it is this: That the Révolution did not end with the whiff of grape-shot by which Bonaparte extinguished the dregs of the Convention.

And if the whole story is based on this wrong idea, that in Vendémiaire, year 4, i.e., Oct., 1795, the hour had come and the Man—so the whole tale is saturated with what I make bold to call shallow and cynical ideas. To treat the greatest intellectual, social, religious, industrial movement of all modern history as a mere accompaniment to a barbaric pæan to despotism; to treat the aspirations and resolves of glorious intellects and of a heroic people as a mere target for boisterous mockery; to find in the agony of the purest devotion and in the visions of immortal hopes materials whereby to build up a grotesque phantasmagoria of human folly and impotence, and deride it with a wild ha! ha! of Mephistophelic wit,—all this, alas! is among the perversions of genius. And what is the philosophy or the gospel in the name of which this is done? That, unluckily, is not so clear. It is the philosophy of one who laughs, like another Rabelais, at

all philosophers of every school. It is the gospel of one who once was a Calvinist, and who is still a Theist, but whose gospel is, for us forty millions, mostly of fools, still unrevealed, still wrapt in the eternal silences and thirty octavo volumes of wit, eloquence, humor, burlesque, and pathos.

But he who has no philosophy, except to do what his own conscience tells each man is the will of God (*i. e.*, for every man to do what he persuades himself he is entitled to do), has little but gibes for the clearest and most fruitful intellects of the world. To Mr. Carlyle, Voltaire, assuredly one of the most powerful, if not the wisest of those who have scattered ideas through their age, is a "trifler" (*persifleur*); so, too, Diderot, one of the giants of philosophy, the most universal mind between Leibnitz and Comte, is a "scoundrel"; and Adam Smith, one of the fathers of social science, nay, one of the fathers of modern society, is a "professor of the dismal science." The eighteenth century is "a fraudulent bankrupt," and the French Revolution is its very appropriate "suicide." This is neither history nor poetry, but the railing of Diogenes in his tub.

Diogenes, we know, was letting men see his own self-love, when he seemed to be showing his own nakedness. And it is a sad thought that to a man of genius, such as Mr. Carlyle, these mighty teachers of the human race are at best but learned triflers, and that their influence over the great events that closed their century is treated by him as trivial, or simply noxious. The most profound and meaning page in all modern history is the page wherein there is told the relation of the great thinkers of the eighteenth century to the great social and political movement of the century. All this is not to be disposed of by a somewhat strident scorn in the name of a somewhat mysterious gospel, which the prophet himself is not very ready to explain. Humor, imagination, dramatic power, sincerity, enthusiasm, insight, and noble ideals are good and rare gifts for a historian; but they are not all.

Thus, then, Mr. Carlyle has given us a poem, one of the finest in our language; a sermon, one of the most impressive ever preached; a narrative, one of the most picturesque ever told; an appeal, one of the most intralling ever uttered; but he has not given us a history of the most important movement in all human civilization. So far as the French Revolution was the simultaneous collapse of an utterly corroded system, so far as it

was a wild outbreak of anarchy and confusion, so far as it was the burning up by unextinguishable fire of all the impostors on the earth,—and it is most true that it was all these,—so far, Mr. Carlyle has given us one of the most wonderful creations of historic art. But the Revolution was a great deal more than these: and so far as it was the foundation of a new epoch in philosophy, science, industry, government, art, morals, and religion,—and it was all this, and more than this; so far as it was constructive as well as destructive; so far as it stimulated realities and truths even by the fire which burnt up shams and falsehood,—in all this Mr. Carlyle is leading us from light into darkness; so far he is a quack, or even wind-bag; his great poem, if taken as narrative, is a simulacrum, and it forms one of the most rickety, though showy, gigs in the universe of letters.

The influence of that Gargantuan burlesque is fortunately passing into the region of mere imaginative literature. It is felt to-day that the greatest effort ever made by man to refashion the scheme of his life has not left us nothing but tears and confusion. The eighteenth century, of which it was the product, is felt now to be among the most potent and fruitful of any in history. The French people, out of whose heart and blood it issued, are not the mob of monkeys and tigers which the reactionary terror painted them; but the people charged in Europe with the evolution of all our republican and social ideals. Let us, then, say with our poet:

“ Who ponders national events shall find
An awful balancing of loss and gain,
Joy based on sorrow, good with ill combined,
And proud deliverance issuing out of pain
And direful throes.”

FREDERIC HARRISON.

SOCIAL FORCES IN THE UNITED STATES.

A NOVEL called "Democracy," very bright and amusing, was published three or four years ago. It describes life in Washington, from the point of view of a person who has little or no faith in democracy as it works in America; and it is so far enlivened by personal sketches, which people try to identify as portraits, that, besides its real merit, it carries with it the charm which belongs to a riddle. "Who is this?" or "When was that?" we are expected to ask,—and we do.

The novel excited its fair share of interest at home, as a bright and witty satire, very well done. But, so far as I observed, it was not considered anywhere a very important book, nor was it reviewed or cited as if it revealed any very important secrets of the political or social life of this country. But I happened to be in England in the summer of 1882. To my surprise, and somewhat to my amusement, I found "Democracy" everywhere. There were several cheap editions. It was largely discussed in the journals. It was often the subject of serious conversation among well informed and thoughtful people. I found myself obliged to recollect, as well as I could, the names of the characters, and to talk over the movement of the story as I might have talked of a critical debate in Parliament, if I had heard one the night before.

The curious fact that a book which had hardly made a ripple in public estimation here made quite a little war there, after two or three years, occupied my attention. I found myself, a dozen times, obliged to make to my English friends some very commonplace statements about American life. I found that those statements were sometimes challenged by people who had never been in the United States, and who, therefore, knew much more of my country than I do, who have lived here sixty years. This is really my reason for asking public attention to some very

familiar observations on social order in America, which I think travelers here are not apt to consider, precisely because they are fundamental. Possibly the journals are not apt to consider them. But, as I suppose, they show not only why "Democracy" is more read in England than in America, but something more. I suppose they show why this country steadily advances in prosperity, happiness, and real success, while, according to the observations most frequently put in print, it would certainly go to destruction in twenty years or less time.

London is the capital of the British empire. If the British empire were governed by such people as "The Ring" of Tweed, Sweeny and Company in New York, it would go at once to destruction. Or, if it were governed by such intrigues as are described in "Democracy" at Washington, it could not long subsist. Now, New York and Washington are called the two capitals of America. In two different senses, they are. Why does not America go to destruction, given such people as Tweed and Sweeny in New York, and granted such intrigue as "Democracy" describes in Washington? This is substantially the question which was put to me, perhaps fifty times in as many days, in England.

It is very difficult to make an Englishman understand the answer. It is much easier to make a Frenchman understand it. De Tocqueville and Laboulaye and Chevalier understood it perfectly. Occasionally, a bright English traveler catches the principle of the answer. Mr. Freeman has caught it, and that charming writer, General William S. Butler, who once walked across North America. But, generally, the Englishman cannot understand, nor believe, that the Edinburghs and Dublins of America are not swallowed up by its one or two Londons. All the same, I shall try to put in print here one or two statements of fact which may perhaps help American travelers when, at some comfortable halting-place in Switzerland, they have to explain to an English friend what will seem to them so absurdly clear as to need no explanation.

The simple truth is, that the United States have no such center of opinion, of fashion, of education, or of politics, as is London. New York is not such a center. Washington is not such a center. On the other hand, the people of the United States do not know, and can hardly be made to understand, how subordinate is the part played in England by what the London

journals condescend to call "the provinces." If Congress governed the United States, as Parliament governs the British empire, the importance which my English friends attached to "Democracy" would be fully justified. In point of fact, as every American reader knows, Congress has charge only of a small part of such responsibilities as fall on Parliament,—perhaps a twentieth part of them. The other nineteen-twentieths belong elsewhere,—perhaps three thousand miles away.

When I was in London, a member of Parliament asked the Government what they were going to do in the case of a school-teacher in Ireland, on whose head, four years before, a black-board had fallen. The proper officer replied. Notice had been given, in advance, of this question. The incident took five or ten minutes of a busy night. It was all in good faith. It was not a bit of obstruction. Imagine a question like that in Washington! Strictly speaking, it ought to make a rebellion, if anybody in Washington presumed to ask what had become of a school-mistress's head in Oregon. Now, because Parliament thus attends to the whole British empire, the proceedings of Parliament are of the very first importance. They are reported at great length in the London papers,—very badly reported, if you will trust an old expert in that business, but still at great length. Four and six large pages of a London newspaper will be given to a single day's session. Now, the comparative unimportance to America of the proceedings of Congress is revealed in the fact that any New York paper is quite satisfied if it give one page to the ordinary record of Congress. Seldom does a report exceed two pages. You shall even see a Monday's paper, in which more space is given to the sermons in the New York pulpits of the day before than to the debates of a crowded day in Washington. This does not mean that the people of New York are specially fond of preaching. It is because the affair at Washington is not specially important to the country. And so indifferent are the Washington papers to reporting the proceedings of Congress, that Congress has to pay the expense of "The Congressional Record" to secure a careful report of its own debates and proceedings.

A striking illustration of the central truth of our system appeared in that long summer when General Garfield lay a-dying. From the 2d of July to the 19th of September there was hardly one subject of such importance as required the personal atten-

tion of the head of the National Administration. The truth is that the country was governed elsewhere. Washington and the President were responsible only for a very small proportion of its government. This is what is meant by "Self-government," if anybody on the other side of the ocean could be made to understand it. But this seems well-nigh impossible.

The English error in this matter is very natural. English readers see few American papers, singularly few American books. A very large class of our most important books is quite unknown in England. The newspapers and journals which they do see are generally those published in New York, and occasionally those published in Boston and in Philadelphia. Naturally enough, though quite erroneously, they suppose that these cities have the same empire over the thought of America as London has over the thought of the British empire. As poor Lord Salisbury said, "they all use very small maps," if, indeed, they use any, and they really think that two or three cities control American life, because all the American literature they see dates from those cities. Now, it happens that two of those three cities which I have named are virtually Irish cities. They are governed by Irishmen, and, indeed, it is probable that a majority of their adult inhabitants are of recent Irish origin. Those cities, therefore, are as badly governed as is everything else which is governed by Irishmen. The English *dilettante* has made up his mind that these cities govern America, and he naturally comes to the conclusion that America must be very badly governed.

In the hope of meeting this delusion if possible, I have taken some pains to find where, in fact, the literary journals of New York find their readers and their support. The figures which I have obtained will show, what everybody in America knows, that though these journals are printed in New York, they are not printed for the Macs and the O's, the Sweenys and Tweeds, who govern New York, but for a very large constituency scattered over all the nation. They are not printed for a few "highly cultivated" people in two or three large cities, but for a great many cultivated people, who live in all parts of the continent. Thus, of the copies of the NORTH AMERICAN REVIEW mailed from its office, almost exactly one-quarter part is sent west of the Mississippi River. The mailing-list of another literary journal of very large circulation shows that twenty per cent. of that circulation is in New England, twenty per cent. in the

four Middle States, ten per cent. in the ten Southern States, and fifty per cent. in the region between the Alleghanies and the Pacific. It is true that the mailing-lists are not an absolute criterion. A very large proportion of the circulation of each of these journals does not appear on them, but is cared for by book-sellers and news agents. These dealers, however, number more than five thousand, and are very widely scattered. The proportions, therefore, if made from the whole circulation, would not differ materially from those which I have shown.

I was, ten years ago, the editor of a serious literary journal published in Boston. It received its character from such papers as Dr. Martineau, Dr. Bellows, and Dr. Dewey wrote for it. It had naturally a considerable circulation in New England, because it was published there. But on examining the publisher's correspondence for a single month, I find that, excluding the orders given from New England, as fairly to be called local, thirty per cent. of the remainder were from New York, sixteen per cent. from Pennsylvania, ten per cent. from Illinois, six per cent. from California, as many from the District of Columbia, as many from Minnesota, and the remaining twenty-six per cent. were divided between Iowa, Michigan, Colorado, Wisconsin, Indiana, Maryland, Canada, New Jersey, Washington Territory, Louisiana, Nebraska, Kansas, Nova Scotia, Kentucky, the Hawaiian Islands, and Japan. I have named first the States which took the largest number.

Nor let any person suppose that periodical literature goes into regions that have no other literature. The quality of reading is a very difficult matter to test, but the publishers of the rival editions of the *Encyclopedia Britannica* tell me that a large proportion of the large sales of that costly and thorough book are made to parties who live west of the Mississippi. One house reports to us that, as far as its own sales go, a quarter part of its very large issues have gone into that region. This means that many thousands of the largest and best encyclopedia in the English language are in that country, of which Robert Livingston said in 1804, "I have assured them (in Paris) that we shall not send an emigrant west of the Mississippi in a hundred years."

We all know that life in the smaller cities or towns is more favorable for habits of reading than life in the large cities. And if any one imagine that the reading of such towns is confined to what is called "popular reading," he is very much mistaken. Two

firms of book-sellers in Boston were kind enough to send me their orders received in one day from twelve different towns. The largest and most distant of these was San Francisco, Cal. From that town, in one order on that day, were Greville's Memoirs, Marlowe's Poems, Talleyrand's and Molière's works. The other eleven orders on that particular day called for the following works: 1. Lessing's Works; Wilhelm Meister. 2. Smiles's Self-Help; McCarthy's Nineteenth Century. 3. Philip Brooks's Sermons. 4. Faith and Unfaith; Lessing's Works. 5. Locke's Philosophical Works; Faith and Unfaith. 6. Whately's Logic; History of Switzerland. 7. Light of Asia; Scotch Sermons; Geikie's Life of Christ. 8. Blackie's Lay Sermons; Dean Stanley's Sermons. 9. Geometry and Faith; Ten Great Religions. 10. Darwin's Origin of Species, and other works; Lecky's England; Mediæval History. 11. Graphic Art; Fergusson's Architecture; Palliser's History of Lace; Campbell's Lives of the Chancellors. In each case, I select two or three of the more serious books from each order. The full twelve lists represent perhaps one two-hundredth part of the books which went from Boston that day to the small towns,—and these lists represent perhaps one-tenth part of that two-hundredth.

As to amount of reading, the distribution of the public library of San Francisco is twice that of Boston in proportion to the population. The public library system of the country, again, shows to a certain degree the books the people choose to read.

Here are two orders, received in the same week for two town libraries: 1. Parks and Gardens of the World; Raphael Studies; Michael Angelo; Japanese Ornaments; Chalmers's British Poets; Ruskin's Poems; Edwards's Essays. 2. Freeman's Norman Conquest; Fergusson's Architecture; Anderson's British Poets; Lord Bacon's Works; Morris's Literature of Ancient Greece; Jowett's Plato; Müller's American Art; Symonds's Renaissance. That is one day's supply of two out of three or four thousand libraries.

These figures will do something to show to readers who need enlightenment that though most books are published in the largest cities of America, it by no means follows that it is in those cities that they are read. So far as the use of books is a test of education, it is certain that the educated class of the United States is quite evenly scattered over the whole country.

The very wide distribution of colleges ought to show the same thing. It is convenient for the under-graduates of the

universities on the sea-board to sneer at "fresh-water colleges." But I observe that Yale and Harvard draw some of their best teachers from colleges "which nobody ever heard of," and the point I have now to make is, that there would not be three or four hundred institutions requiring Latin and Greek and some high mathematical training as part of their course, unless there were very widely scattered an educated class which directs society, insisting on the higher education. Apart from the undergraduate nonsense about "fresh-water colleges," the intelligent men of the country know how to respect the endowments and the staff of the University of Wisconsin, the University of Virginia, the University of St. Louis, the University of Michigan, and Cornell University, at Ithaca, as belonging in the same class of institutions as the Johns Hopkins University, Columbia College, Yale College, and Harvard College. The endowments of some of these Western colleges are more than princely. Princes have never made such endowments. And their administration is wise. I do not mean to imply that Montana, Colorado, or even Illinois or Michigan is crowded with people who can discuss Greek accents, or who talk about the last sweet thing relating to quaternions. I speak of the colleges simply to show the drift of feeling in the West, and its readiness to encourage the best cultivation of which people know. You would not have universities, each with four or five millions of endowment, in regions indifferent to the higher education; and you would not have them in regions where men of the higher education were merely exceptional. You only have them in regions where such men are among the leaders of the social order.

Of course, it is difficult to show, by statistics, just where such people are. But it has seemed to me that a good test would be the analysis of the list of Fellows of the American Association for the Advancement of Science. The members of this institution are all from the United States or the British Dominion. They choose from their own number the Fellows, who are all men engaged in science, or who have materially aided in its advancement. Of these Fellows, there are five hundred and twenty-one. It is interesting to see how they are territorially divided. We have to eliminate, as these gentlemen would themselves say, one or two abnormal factors. First, the officers of the army and navy and of the scientific surveys conducted by the National Government return their addresses as at Wash-

ington, though in fact, in many cases, they spend the active part of the year, perhaps the whole of it, far away. Second, the association was chartered in Massachusetts. It has held more meetings there than in any other State, and the place of meeting, to a certain extent, affects the number of members. Again, the largest university in America is in Massachusetts, and the number of its scientific professors, to a certain extent, enlarges the Massachusetts quota. Allowing for these disturbances, the reader will see that for the country at large the distribution of the Fellows of this scientific society ranges over the Northern, Western, and Pacific States in a ratio curiously near to their population. The Southern States, or their leaders, for their own purposes have chosen to keep well out of any such calculations. Of the five hundred and twenty-one Fellows, ten belong in the British Dominion. Of the remaining five hundred and eleven, ninety-six belong to Massachusetts and fifty-eight to Washington, which are, for the reason I have mentioned, exceptional. There remain three hundred and fifty-seven names, which are divided among the following States in the number indicated: New York, seventy-four; Pennsylvania, thirty-nine; Connecticut, thirty-nine; Ohio, thirty-one; New Jersey, twenty-four; Illinois, seventeen; Missouri, sixteen; Maryland, fifteen; Michigan and Rhode Island, ten each; California and Indiana, eight each; Kentucky, seven; Wisconsin, six; Tennessee, New Hampshire, and Iowa, five each; Virginia, four; Vermont, West Virginia, North Carolina, and Utah, two each; Delaware, Georgia, Alabama, Louisiana, Nebraska, Kansas, Texas, one each. The other States have no Fellows.*

Not to adduce more of such statistics, here is the truth regarding our social order: Where enough people live together, for the growth of the better social institutions, there are enough people of education and refined habit to take the lead of that

* Readers who have no census tables at hand may be interested to compare this list with the order of the same States for population. It is this: New York, Pennsylvania, Ohio, Illinois, Missouri, Indiana, Kentucky, Michigan, Iowa, Texas, Tennessee, Georgia, Virginia, North Carolina, Wisconsin, Alabama, New Jersey, South Carolina, Kansas, Louisiana, Maryland, California, Minnesota, West Virginia, Nebraska, New Hampshire, Delaware, Vermont, Rhode Island, Colorado. The number in Connecticut, New Jersey, Maryland, and Rhode Island has been raised above the average by the presence in these States of Yale College, of Princeton College, of the Johns Hopkins University, and of Brown University.

social order and to lead it well. Good sense and good breeding go to the front, as their very names imply that they will. And to the question why "Democracy" excited so little attention here, the answer is that at least forty other centers thought themselves quite as important as Washington. Good society in Detroit and Columbus and Burlington and Albany, and five hundred other places, had in each case its own interests; if you please, its own gossip and its own scandal. It was far too much interested in its own affairs to distress itself a great deal about the fact that "Democracy" thought ill of people in Washington. It read "Democracy"; but it did not much care that some bright unknown writer who had spent a great deal of life in Europe was soured by what he or she saw in Washington. Had you accosted a person at an evening party in Goshen or Akron, or some other town you never heard of, and asked about the book, he would have said, after he had made sure you did not write it, "I do not think that Washington governs America."

Go to Washington any summer, and see what a hard life the Newspaper Row people have in making up the rigmarole which they call news, which they shall contradict the next day; while all the heads of department are away, leaving one official to telegraph to the acting Vice-President, if by ill-luck the President, at his retreat, should break his neck. Or, stay at home, and consider how days or weeks pass without any allusion to what Washington has to say or do outside the newspapers. People are interested in home affairs, talk about those affairs, and give only a small share of their attention to the subject discussed the day before in Washington. Thus, the question of the quality of sugar which the Government of the nation provided for Bare-bones or Red Cloud, occupied the attention of the critics of the National Administration for some weeks a few years ago. It was exactly as important as the question as to the quality of sugar which the State of Missouri provided for its insane hospitals, or the State of New York for its home for inebriates. It was neither more important nor less. The quantity of supply was probably much less than in either of those cases. Now, the fact that it is discussed at Washington does not deceive the American, used to the American constitutions. True, a Washington correspondent may fill half a column with it in hard stress for material. But the American citizen is not deceived. He does not read the half column. He

does not care much for the discussion. He knows that substantial justice will probably be done, or he hopes so. Any way, he means to attend to the part of the business that belongs to him. If the people at the center botch very badly the part that belongs to them, he will turn them out some day. But he does not make the mistake of thinking that their brown sugar is more important than his brown sugar, because it happens to be bought from the national treasury. This is to say, in a figure, that what are called the affairs of the nation, which are transacted at Washington, do not approach to the magnitude or the importance of the affairs of the country, which are transacted elsewhere.

Meanwhile, in all these centers—Goshen, Akron, Fremont, Mentor, Burlington, Ann Arbor, Springfield, Syracuse, and a thousand others—are growing up men of affairs. On some fine day the country, in what seems a blind way, reaches out its hand to find a man who shall take the oversight of the National Administration. From one such place it picks out Abraham Lincoln; from another it picks out James Abram Garfield. Then you strike an attitude, and say: "Ah! these were exceptional men. Very extraordinary; but General Garfield read 'Horace.'" It is not extraordinary at all. The way in which the country is governed—not at a center, but in the places where the government is needed—gives you such men. You do not look for them merely in bureaus of central administration. You look for them, and you find them, wherever there has been government to administer, or other good work to be done.

E. E. HALE.

NORTH AMERICAN REVIEW.

No. CCCXXIV.

NOVEMBER, 1883.

LIMITED SUFFRAGE IN RHODE ISLAND.

It may be safely said that more has been written, and that less is understood, about the political institutions of Rhode Island than of any of the other States. The subject has unfortunately passed into the province of partisan discussion, a field especially unsuited to candid statement of facts, and little favorable to impartial weighing of arguments. Moreover, the discussion has been largely carried on, without the State, by those who neither enjoy the advantages nor suffer the inconveniences of the system which they criticise, who have no practical experience of the reasons in which it is founded, and to whom the subject can present itself only as a matter of mere political speculation or of missionary enterprise.

It has occurred to me to bring forward some considerations upon the subject, and although they will be mainly a repetition of what I have said elsewhere, I do not flatter myself that my previous utterances have gone far enough to deprive them of any freshness which they may originally have possessed.

It has been widely represented that the suffrage in Rhode Island attaches strictly to the soil, and that no man is permitted to vote unless he be the owner of a certain value of land. If this were true, it would be a sufficient answer that it was a matter of our own exclusive concern; that the limitation of the suffrage suited us, who alone were affected by it; that they who did not like it were under no obligation to come within its reach; and

that while we extend a cordial welcome to all whose interests or inclinations lead them to pass within our limits, we do not see fit to alter our institutions to suit the ideas of government, the opinions, and the tastes which they may bring with them.

When Rhode Island entered the Union, her government was one of the most liberal of those then existing, nearly all of which required a property qualification for the suffrage; many of them a much larger qualification for holding office, proportioned to its dignity and importance; and several of them a religious test. In Rhode Island, no qualification was required for holding office beyond that for the exercise of the suffrage, and absolute freedom of religion was an essential principle of the government. The powers of the executive were stringently limited; and nearly the whole authority of the State was delegated to a legislature, the most numerous branch of which was chosen twice a year.

More slowly than in the case of her sister States, the sturdy conservatism of Rhode Island has yielded to the liberalizing temper of the times, which has carried some of them far beyond the limits of safe and prudent government, and has brought them within sight of communism; which has broken down the barriers that protect individual independence, and has endangered the very rights of property; and although, as respects citizens born in the United States, she has surrendered the land qualification for suffrage, she retains it for citizens of foreign birth. This qualification is not at all burdensome, being a landed estate of the value of one hundred and thirty-four dollars, or of the yearly rental value of seven dollars.

I shall not discuss the right of each State to establish its own suffrage, and to prescribe the terms on which persons may enter the body politic: this I assume is universally conceded. Even the committee appointed by the Senate of the United States in 1879 to visit Rhode Island, and to inquire into the right of the people of this State to manage their own affairs in their own way, while strongly disapproving of our restricted suffrage, did not dispute but expressly admitted our right to establish, to maintain, and to modify it at our own good pleasure. Nor shall I waste time in antagonizing the sentimental idea that suffrage is a natural right. I assume that it is conceded by all thinking men, that suffrage, in its very character and constitution, is a right or a privilege growing out of society, and that its conditions and limitations are properly fixed by society; else there could be no limitation of sex, no requirement of a term of resi-

dence, scarcely of age, for undoubtedly some lads of eighteen are better qualified to exercise the right of suffrage than their fathers. Certainly, if it were a natural and inalienable right, it could not be limited by the condition of paying taxes, which is, in its nature, similar to a property qualification.

The circumstances of the foundation and settlement of Rhode Island were peculiar. The early settlers were distinguished by a marked individuality of character, and this individuality, in some cases, consolidated and stamped itself upon the State. Among the traits that it has developed are an adherence to old customs, a reverence for the traditions of the founders, an attachment to the ways and methods of the fathers. The people of Rhode Island have preserved with scrupulous care the forms and ceremonies of their government.*

It is not strange that a people of this stable character should adhere tenaciously to the political institutions which have so long protected them, and under which they have attained to so great prosperity; but this conservative disposition has not by any means retarded the progress of the State in high civilization, and the people have more substantial reasons than a sentimental respect for tradition and long custom, for adherence to their peculiar suffrage. Under it Rhode Island has become the most densely populated State in the Union; the accumulations of its diversified industry have made its people one of the richest; their labor has been well rewarded; their government has been, on the whole, well administered; responsibility, order, economy, integrity have characterized it. The institutions of learning, of religion, of charity, and of benevolence have been munificently maintained, and popular education has been generally extended and amply supported. Nowhere on the face of the earth do

* The inaugural ceremonies at the election of governor and general officers have been handed down without change from colonial times. The proclamation that was formerly made from the steps of the great hall of the tavern, where the election was held, and which was then a matter of substance, and gave the first information of the result, but which is now made from the balcony over the grand entrance of the State House at Newport (which venerable structure was erected in the earlier part of the last century, and was said at the time to be "a Colony House, the like of which is not in any of the colonies"), has long since ceased to be anything but a mere form. In the rural parts of the State, quaint customs, descended from the olden time, prevail. It is only within a few years that the old English custom of commemorating "Guy Fawkes's day," by bonfires and burning in effigy, was abandoned in the ancient town of Bristol, which was not however originally a part of Rhode Island, but was acquired from Massachusetts.

the laboring population enjoy more of the comforts and the luxuries of life or greater advantages for their children; nowhere is a greater proportion of the property of the State in the hands of the men who have earned it; and, although there is much inherited wealth, nowhere has so large a class of the people risen by their own industry to competency and opulence. The deposits in the savings banks—a good indication of the prosperity of the working classes—aggregate \$46,771,728, or an average of \$169 to every soul in the State, and distributed among 102,991 persons, comprising considerably more than one-third of the total population. This exceeds the ratio of deposits to population in New York, Massachusetts, and Connecticut, where, I suppose, it is greater than in the other States, except Rhode Island. I do not believe that any other community in the world exhibits, by this test, so great prosperity among its laboring population.

The population of Rhode Island is peculiar in this, that the proportion of the agricultural to the mechanical and manufacturing classes is comparatively small. Parts of the State are exceedingly fertile, but the rugged and ungrateful soil of the greater portion of it offers too little encouragement to thorough cultivation; the restless and enterprising character of the people has found expression in other pursuits of industry. The rivers of the State are fringed with factories and workshops, and the smoke that ascends unceasingly from their hundreds of chimneys darkens the atmosphere of day, and the flames illumine the blackness of night. The agricultural population of the old thirteen States largely exceeds the manufacturing and mechanical together. Taking the whole country, the agricultural is more than double the manufacturing and mechanical. In Rhode Island, the agricultural population numbers less than one quarter of the manufacturing and mechanical. Now, all experience has shown that the agricultural class is the safest depository of political power. Men who live on their paternal acres, and who maintain themselves by the labor of their hands, are conservative in their temper, cautious in change, and averse to political experiment. They are, of necessity, industrious and economical, careful of their hard-earned accumulations. They are generally above the average standard of integrity, thoughtful and considerate, and altogether—of course, with many exceptions and not without important limitations—they unite, more than any other considerable class of people, the qualities that fit men to govern a free State. The manufacturing and mechanical classes, al-

though in this country generally well informed, and in many cases cultivated, especially where they have enjoyed the advantages of our free schools, are more transient, without the strong local attachment that distinguishes the agricultural class; and, moving from place to place, and from State to State, as the inducements of higher wages and the opportunities of bettering themselves are presented, they have feeblor ties of possession to bind them to the State, and, comparatively, but a passing interest in its welfare. To these classes generally belong the citizens of foreign birth in Rhode Island. They are useful citizens, indeed, indispensable to the development of the industries and the production and to the prosecution of the enterprises of the State; they may well be intrusted with a portion of the political power, but they cannot safely be made the ruling class, as they would practically be or would soon become in Rhode Island, if admitted to an equality of suffrage.

The immigration from Europe is not largely composed of the most intelligent and cultivated classes. It is in a great degree made up of men who have known government at home chiefly by its exactions and its oppressions; and the memory of these, working upon poverty and ignorance, has engendered a hostility to all government, to all the restraints, even the most healthy and necessary, of law. They require an education under republican institutions before they can be qualified to participate in them; and although the legal conditions of naturalization wisely provide for such term of probation, these are made nugatory by their shamefully lax administration. If the immigrants who settle in Rhode Island were naturalized only in our own courts or in the courts of the United States within our borders, they would be better qualified for citizenship; but we are compelled to accept them as they come to us from portions of the Union where the law is altogether disregarded, and where men, dismissed from the almshouses and prisons of Europe, are admitted to the full rights of American citizenship before they have been in the country long enough to have learned to perjure themselves in intelligible English. The naturalization frauds in the city of New York alone are sufficient to poison the suffrage of the whole country. The restrictions of the law are wholly and notoriously disregarded, and applicants are admitted to citizenship on testimony which no judge would submit to a jury in a case where five dollars were involved. Hundreds are passed at once, on the testimony of a single witness who does not know

one of them; and it is in proof that more have been passed in an hour than could go through the forms properly and decently in a day. These men, thus transformed into American citizens, in violation of the plainest provisions of law, ignorant of our institutions, unacquainted with our form of government, embittered against all government, and ready with little solicitation to become the instruments of demagogues, are sufficiently dangerous, when absorbed in the great agricultural States where healthy American sentiment prevails, but they are a menace to the public tranquillity and the stability of regulated and orderly government, when precipitated, in overwhelming numbers, upon a small community like Rhode Island.

It is for these reasons that the people of Rhode Island have maintained the restriction upon the foreign suffrage, a restriction that originally applied to the whole body of the citizens, but which, forty years ago, was removed from those of native birth. With the examples of Chicago and New York City before them, they dare not undertake the experiment of removing it from the foreign-born citizens; they dare not make the change, which, once made, could never be reversed. They believe that, with the suffrage of those cities, they would suffer the government of those cities, unrestrained by the influence of the rural population, which, in the States of New York and Illinois, controls in the legislative houses the excesses and violence of their chief commercial centers. Can a worse government be conceived than that of New York City or of Chicago left to itself!

That the restriction upon the foreign suffrage does not discourage the immigration of this class of citizens is abundantly shown by the large accessions to our population from this source. The proportion of foreign-born population to native in this State exceeds that of any other of the old thirteen, and is more than double that of the whole country. This proportion in the country at large is 13.32 per cent., in the old thirteen it is 14.17 per cent., in Rhode Island it is 26.76. Nor is the foreign-born population of Rhode Island surpassed by that of any other State in thrift, in industry, in orderly behavior, and in respect for law. The requirement of the possession of land as a qualification for suffrage encourages habits of industry and economy, promotes the self-respect of the land-holder, and has undoubtedly done much for the elevation of this class of our citizens.

It is somewhat singular that the government of Rhode Island, which, under the colonial charter, was the nearest to a pure

democracy of any in the world, which grasped the great principles of civil and religious liberty so comprehensively and so completely, and carried them so fearlessly to their ultimate, legitimate conclusions, which certainly has never abandoned them, and which embodied the seminal principles of civil as well as of religious liberty, should now be stigmatized as aristocratic and anti-republican by States that are enjoying the results of her example in the "lively experiment that a most flourishing State may stand and best be maintained with a full liberty of religious concerns." The charter, in thoughtful deference to the consciences and the creeds of some of the colonists, which were so various "that, if a man had lost his religious opinions, he might have been sure to find them again in some village of Rhode Island," dispensed even with the oath of allegiance to the crown. No royal governor was appointed, but the people elected all their magistrates; and even the requirement that the laws be not repugnant to the laws of England, but as near as might be conformable to them, was modified by the condition, "considering the nature and constitution of the place and people there." "And so it came to pass," says Bancroft, "that the little 'democracie' which, at the beat of the drum or the voice of the herald, used to assemble beneath an oak or by the open sea-side, was famous for its 'headiness and tumults,' its stormy town-meetings and the angry feuds of its herdsmen and shepherds. But, true as the needle to the pole, the popular will instinctively pursued the popular interest. Amid the jarring quarrels of rival statesmen in the plantations, good men were chosen to administer the government, and the spirit of mercy, of liberality, and wisdom, was impressed on its legislation. 'Our popularitie,' say its records, 'shall not, as some conjecture it will, prove an anarchie and so a common tirannie; for we are exceedingly desirous to preserve every man safe in his person, name, and estate.'"

Again: "this first system has had its influence on the whole political history of Rhode Island; in no State in the world, not even in the agricultural State of Vermont, has the magistracy so little power, or the representatives of the freemen so much. The annals of Rhode Island, if written in the spirit of philosophy, would exhibit the forms of society under a peculiar aspect: had the territory of the State corresponded to the importance and singularity of the principles of its early existence, the world would have been filled with wonder at the phenomena of its history."

And again: "this charter of government, constituting, as it then seemed, a pure democracy and establishing a political system which few, besides the Rhode Islanders themselves, believed to be practicable, is still in existence [1838] and is the oldest constitutional charter, now valid, in the world. It has outlived the principles of Clarendon and the policy of Charles II. The probable population of Rhode Island, at the time of its reception, may have been two thousand five hundred. In one hundred and seventy years that number has increased forty-fold; and the government, which was hardly thought to contain checks enough on the power of the people, to endure even among shepherds and farmers, protects a dense population and the accumulations of a widely extended commerce. Nowhere in the world have life, liberty, and property been safer than in Rhode Island."

The authority of the General Assembly, which, like that of the British Parliament, had been styled omnipotent, till controlled by the constitution of the United States, sufficed for such modifications of the fundamental law as the growth of the State, the development of its industries, and the changes of time rendered necessary, until 1842, when this, the oldest written form of government valid in the world, was superseded by the present constitution, repeated attempts to make the change having previously failed. The duration of the charter government and the adherence of the people to its great principles sufficiently attest the contentment, with their form of government, of those who were affected by it; and the repeated refusals of the electors to enlarge the suffrage beyond the limits fixed by the constitution which superseded the charter, equally attest their attachment to the restriction. They believe that this peculiarity, in consequence of which or in spite of which they have flourished, almost beyond example, is essential to their growth and prosperity and to their safety.

Such are the views which the people of Rhode Island entertain of government, of the government suited to themselves. They do not obtrude those views upon others, nor do they propose to modify them under outside pressure. There are communities around us where the rule is in the hands of men of foreign birth. There are States where foreigners, unnaturalized, are admitted to the equal rights of suffrage. The people who enacted those provisions had the right to do so. They would have the right to send to Ireland or to Germany, there to collect, return, and count, the votes of persons who contemplate emigration to this country. It would be none of our business.

How many thoughtful men, in the cities of New York and Chicago, would hail with delight the modification of their suffrage to conform to ours, we do not inquire. We only know that it cannot be done, and that, if ours is modified to conform to theirs, it cannot be changed back again. Revolutions of this kind, certainly, never go backward. Although in drawing the line, to exclude the dangerous and the unworthy classes from participation in the government, we exclude some, doubtless many, who are well fitted for it, and include others who are not, still this objection would lie against any test that could be applied. The test should be intelligence and virtue. These cannot be measured or defined, and we think that, in the imperfection of all human institutions, the property qualification is practically the best that can be established, that on the whole it excludes more of the unworthy and fewer of the worthy than any other that can be devised. At all events, the commonwealth has wonderfully flourished under the prevailing system, and until we find another that commends itself better to our judgment, we are not likely to abandon it,—certainly not in the face of the practical results of unlimited suffrage in communities otherwise like our own.*

H. B. ANTHONY.

* "It has been argued that the right to restrict the suffrage by a landed qualification might allow the practical denial of the right by exaggerating the value of the qualification, and it is asked, triumphantly, why may not the same power that limits the qualification to \$134 extend it to \$10,000, which would be less in purchasing power than the ancient qualification for governor, lieutenant-governor, or privy counselor of South Carolina? This could only be done by the people, who would not be likely thus to disfranchise themselves, however they might have the sovereign right to do so. But the argument drawn from the liability of abusing the restriction is an argument against any qualification for voting. What is to prevent the people from forming a constitution that shall limit the suffrage to men of seventy years of age? Therefore should there be no limitation of age? What is to prevent them from limiting it to men who have resided fifty years in the State? Therefore should there be no qualification of residence? What is to prevent the Legislature from assessing a tax of fifty per cent. upon property? Therefore should it not have the power of taxation? What is to prevent the Legislature from making Sabbath-breaking and profane swearing capital crimes? Therefore should it not have the power to define crimes, and to affix the punishment of them? No power can be wholly protected from abuse; but power must be granted for the purposes of government, and the supervision of the people over their servants, to whom they delegate it, must be relied upon to restrain it within reasonable limits, and to prevent any exercise of that power for extravagant purposes."—*Speech in the Senate, February, 1881, in defense of Rhode Island.*

THE GOVERNMENT AND THE TELEGRAPH.

MANY persons and not a few influential journals are now advocating a government telegraph. This proposition involves the consideration of both the power and the policy of our Government undertaking this important commercial function. Can the Government acquire, own, and operate a general system of telegraphy for commercial uses under the limited powers of the constitution? If so, is there any necessity for, or probable advantage to be derived from, such undertaking by the Government? And are there not grave political reasons why the Government should not assume and control this important medium of ready and rapid communication? These questions will form the subject of the present article.

POWER.—Although European governments have monopolized the telegraph within their respective dominions, except for oceanic cable service, it does not necessarily follow that the United States may lawfully do so. Ours is a constitutional government; and the very object of the constitution is to define and limit its powers and duties. In fact, the constitution is a compact or charter enacted by the several States, by virtue of which the Government of the United States was created and established, and under which it still exists.

There is much clamor throughout the country and in the public journals about the abuse of charter powers; and the tendency of the courts is to rule a strict construction and rigid limit to the powers clearly granted. If the same rigid observance of constitutional limitations had been demanded of the Government there would have been no occasion for the general outcry against the extravagant appropriations of the last Congress.

Articles IX. and X. of the amendments to the Federal constitution read as follows :

“IX. The enumeration in the constitution of certain rights shall not be construed to deny or disparage others retained by the people.

“X. The powers not delegated to the United States by the constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.”

These amendments are among those which were proposed by enactment of the first Congress that assembled, and were evolved in the discussions of the ratification of the original instrument by the legislatures of the several States. They may be regarded as the understood conditions upon which the Government was constitutionally established ; and therefore they distinctly exhibit the intent and purpose of its creators to restrict the powers of the Government strictly within the limits fixed by the constitution.

Now, the grants of power under which it is claimed that the Government may assume and control that great right hand of commerce, the telegraph, must be read in the light of these restraining articles. They are two grants in Section 8 of Article I., and are as follows :

“To establish post-offices and post-roads.

“To regulate commerce with foreign nations and among the several States and with Indian tribes.”

If the power is assumed under the postal grant, then the most the Government can do is to hire the transmission of messages taken at and delivered from the post-offices, as it hires the carrying of mails by contract on the best terms it can make. The Government does not carry the mails. It hires others to carry them, and has always done so. It has never claimed the power to build or own railroads, or steam-boats, or even stage-coaches, or to appoint employés for their operation, to carry on the postal service. But it is now assumed that the Government may build or own a telegraph, equip it for operation, and employ a numerous staff of officers and agents for its commercial service, thus exercising powers that no one has ever claimed that it possesses in respect to the postal service.

The striking brevity and concise language of that grant tell the whole story as to the limitation of power it was intended to

define. There were neither railroads nor steam-boats at the date of its enactment. The mails were carried chiefly by stage-coaches and, in the more sparsely settled parts of the country, on horseback. But there were some people then, as there are now, who thought the Government should own the stage-coaches, horses, and equipments, and appoint the officers and agents to operate them. The stage-coaches, however, must carry passengers, and this was a traffic in which the Government could not properly engage; and as this traffic was, on most lines, itself a source of profit, and as the Government would probably not conduct the business as economically, or as energetically, as individual or corporate enterprise, it was considered far better that the Government should have the mails carried by contract than that it should undertake the joint business of carrying mails and passengers. Hence the very restricted concession of power, "To establish post-offices and post-roads." Such had been the result of experience in the mother country; and now, a hundred years later, the same principles apply with equal force to the telegraph, should the Government determine to go into the business at all.

But the telegraph is not a postal service. It does not transport sealed packages, or original communications; nor is it by any means so generally used by the people. Many points of marked dissimilarity might be noted; but as the whole subject of the nature of the telegraph has been repeatedly defined and adjudicated by the Supreme Court, the authority of that high tribunal must settle the question.

In the case of the *Western Union Telegraph Company vs. The State of Texas* (105 U. S., 464), Chief-Justice Waite, in rendering the decision of the court, said:

"In *Pensacola Telegraph Company vs. Western Union Telegraph Company* (96 U. S., 1), this court held that the telegraph was an instrument of commerce, and that telegraph companies were subject to the regulating power of Congress in respect to their foreign and interstate business. A telegraph company occupies the same relation to commerce, as a carrier of messages, that a railroad company does as a carrier of goods. Both companies are instruments of commerce, and their business is commerce itself. They do their transportation in different ways, and their liabilities are, in some respects, different, but they are both indispensable to those engaged to any considerable extent in commercial pursuits."

The decisions of the Supreme Court establish the law of the land; and are as binding upon each and every department of

the Government as upon the humblest citizen. Here, then, are two important decisions (including the one cited by the Chief-Justice) which define the telegraph to be so essentially a part of commerce that "its business is commerce itself." If it is commerce itself it can not be postal, any more than the railroads that carry the letters are postal. The power must, therefore, be looked for in the clause giving Congress "power to regulate commerce with foreign nations and among the States." And here, again, we have these two important decisions above referred to, defining the extent of that power. It was held that "the telegraph companies were subject to the regulating power of Congress in respect to their foreign and interstate business." This is a very important limitation of the power of Congress in the premises. It exists only "in respect to their foreign and interstate business."

With the exception of less than half a dozen great commercial centers, more than half the business of any telegraph station is done with offices within a radius of one hundred miles. Take such a station as Columbus, the capital of Ohio, or any other considerable town in the interior of any of the larger States, and more than half its business is done entirely within the State. As to business of this class, the Supreme Court has held that it is not even "subject to the regulation of Congress."

But the power to regulate does not mean, and was never intended to mean, the power to own the plant and carry on a commercial business between the States; and much less to conduct a local traffic within a State. The reservation of the power to regulate commerce among the States grew out of the apprehension that States might impose improper burdens or restrictions on traffic with other States. It was not enough to say that "No State shall, without the consent of Congress, lay any imposts or duties on imports or exports," etc.; but lest there might be imposed some other form of tax or hinderance, and in order that trade between the States should be maintained free and without incumbrance, Congress was given this supervisory power to "regulate commerce among the States."

If the Government can appropriate the telegraph and enter upon commercial traffic in this important branch of business, it may also assume to own the railroads and carry on railroad traffic; and if the railroads, then also the warehouses and grain elevators; and if these, why not the flour mills, and, with infinitely more public benefit, the bakers' shops also? For every one

of the fifty-two millions of people is personally interested in the supply and low price of bread, while there are not half a million in the whole population that ever did use the telegraph.

It is not believed, and has never been judicially held, that this power to "regulate commerce among the States" goes so far as to authorize Congress to fix the price as between buyer and seller; and the business of railroads and telegraphs has been judicially held to be commerce. Therefore, Congress has never assumed to fix the rates of tolls or charges for transportation of freights or passengers, or for the transmission of messages; and in the act of 1866 it only assumed the power to fix the rates for Government messages by a contract with the telegraph companies. The power to regulate is precisely power to prevent unjust discriminations against a fair and open competition.

The further grant of power in the eighth section of the first article of the constitution, "To make all laws which shall be necessary and proper to carry into execution the foregoing powers," etc., cannot be drawn upon unless the power is found to exist. But, if it be determined that the Government shall enter upon a public telegraph service, then it has acquired the right and is under obligation to take the existing telegraph properties in the country at valuation, as provided in the act of 1866, nearly, if not quite, all the existing telegraph companies having accepted the provisions of that act. This act of Congress was quoted entire in the case of the Pensacola Telegraph Company *vs.* The Western Union Telegraph Company (96 U. S., 1), and was held to be "a legitimate regulation of commercial intercourse among the States." It is in the nature of a compact, requiring the acceptance of the telegraph companies, and is as follows, to wit:

"An act to aid in the construction of telegraph lines, and to secure to the Government the use of the same for postal, military, and other purposes.

"Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, that any telegraph company now organized, or which may hereafter be organized, under the laws of any State in this Union, shall have the right to construct, maintain, and operate lines of telegraph through and over any portion of the public domain of the United States, over and along any of the military or post roads of the United States which have been or may hereafter be declared such by act of Congress, and over, under, or across the navigable streams or waters of the United States: Provided, that such lines of telegraph shall be so constructed and maintained as not to obstruct the navigation of such streams and waters, or interfere with the ordinary travel of such military or post

roads. And any of said companies shall have the right to take and use from such public lands the necessary stone, timber, and other materials for its posts, piers, stations, and other needful uses in the construction, maintenance, and operation of said lines of telegraph, and may preëempt and use such portion of the unoccupied public lands subject to preëmption, through which its said lines of telegraph may be located, as may be necessary for its stations, not exceeding forty acres for each station; but such stations shall not be within fifteen miles of each other.

“SEC. 2. And be it further enacted, that telegraphic communications between the several departments of the Government of the United States and their officers and agents shall, in their transmission over the lines of any of the said companies, have priority over all other business, and shall be sent at rates to be annually fixed by the Postmaster-General.

“SEC. 3. And be it further enacted, that the rights and privileges hereby granted shall not be transferred by any company acting under this act to any other corporation, association, or person: Provided, however, that the United States may, at any time after the expiration of five years from the date of the passage of this act, for postal, military or other purposes, purchase all the telegraph lines, property, and effects of any or all of said companies at an appraised value, to be ascertained by five competent disinterested persons, two of whom shall be selected by the Postmaster-General of the United States, two by the company interested, and one by the four so previously selected.

“SEC. 4. And be it further enacted, that before any telegraph company shall exercise any of the powers or privileges conferred by this act, such company shall file their written acceptance, with the Postmaster-General, of the restrictions and obligations required by this act.” 14 Stat., 221; Rev. Stat., sec. 5263 *et seq.*

The provisions of this act have as yet been of very little benefit to the telegraph companies, while the obligations they have assumed in accepting the act have been very onerous. The rates for government service have been reduced by the Postmaster-General from time to time under the provisions of the act, until government messages are transmitted at an absolute loss to the telegraph companies. The government service, including meteorological reports, requires the preferential use, several times per day, of over thirty thousand miles of wire; and all government messages have precedence of all other business as stipulated in the act. This very exacting service is required to be performed at rates of toll below the average cost to the companies of handling their entire business.

Government can do business at a loss by increasing taxation to make up that loss; and has not hesitated to do the postal service at great loss to meet the public outcry for cheap postage. It is scarcely conceivable that any government would do an act

of such great injustice, to so large a portion of its citizens and to many citizens of other countries, who own the existing telegraph properties, as to establish a competing telegraph system to the detriment, or destruction, of the value of existing investments. Besides, the Government would labor under great embarrassments; for though the Morse patents have expired, all the best forms of telegraph instruments, batteries, and other appurtenances are protected by more recent patents, which the Government has no more right, than any citizen or corporation, to use without the consent of the owners. And this has been distinctly held by decision of the U. S. Circuit Court for the Southern District of New York, in the case of *Campbell vs. James*, for infringement in the use of a canceling stamp in the New York Post-office.

Now, the faith of Congress having been pledged in the act of 1866, which has been accepted by the telegraph companies, and by them faithfully observed for over sixteen years, at great cost to their revenues, the conclusion is forced upon any fair-minded man that, if the Government shall determine to assume the telegraph business at all, it can rightfully do so only by recognizing the act of 1866 as a contract, and electing to take existing properties and franchises in the form and manner and on the terms and conditions fixed by the provisions of the act of 1866.

Another reason for taking existing properties is, that whatever business the Government does, it must do it to the exclusion of other agencies; otherwise, the Government would either have to do business at a loss or be badly beaten by private enterprise. Chief-Justice Waite, in the decision in the Pensacola telegraph case, before quoted from, says: "It is not necessary now to inquire whether Congress may assume the telegraph as part of the postal service, and exclude all others from its use." This significant language of the court, while it implies a doubt whether Congress has the power, plainly indicates that, if the telegraph be assumed, it must be to the exclusion of all other competitors. And such has been the example of all the governments that own and operate the telegraph. The same doubt of power is expressed in the dissenting opinion of Justices Field and Hunt, in the same case, in a more significant form. They say: "We are not called upon to say that Congress may not construct a railroad as a post-road, or erect for postal purposes

a telegraph line." This implies what they would say if they were called upon to adjudicate that question.

POLICY.—The question of public policy naturally divides itself into those of necessity and expediency. If it can be shown that the telegraph in this country, under individual and corporate management, is, in most respects, far ahead of the system in any other country; and that the public have a better, more prompt, and more generally accurate service, and at lower rates, taken as a whole, than is rendered by any government administration of the telegraph, then there is no public necessity for government intervention in the premises.

And if no such necessity exists, and it be reasonably shown that the service would not probably be so good under a government administration; and would not probably command the undivided confidence of all parties desiring to use it to the same extent; and if it be further shown that the telegraph is capable of great abuse for political purposes in the hands of any party that may happen to be in power, then it may be fairly concluded that it is inexpedient for the Government to intervene.

WIRE AND OFFICE FACILITIES.—It will be sufficient to compare the facilities for telegraph business in this country with those of the four leading countries of Europe most advanced in the science and use of the telegraph. The mileage of telegraph lines in these countries is as follows :

In Great Britain	23,000 miles.
In Germany	41,000 "
In France	36,000 "
In Austria and Hungary	30,000 "
In the United States	180,000 "

It will be seen that there have been established in the United States, by private enterprise, about fifty thousand miles of telegraph lines in excess of the aggregate mileage in all these great European countries. On the lines in the United States there are about 500,000 miles of wire, which is believed to be as greatly in excess of that in the countries named as the excess in mileage of lines. The population of the four countries named aggregates about 150,000,000, and that of the United States is about 52,000,000. While there is, therefore, an average of less than one mile of line for each 1000 of population in Europe, the

people of this country have nearly a mile of line for each 300, and nearly a mile of wire for each 100 inhabitants. A comparison with each country separately would be about as favorable, Great Britain being somewhat in advance of the others.

There are in the United States about 14,000 telegraph stations, against 5700 on the British postal lines. In this country there is a telegraph office for each 3700 of population, while in Great Britain there is only a station for each 6700 souls. The proportion of offices kept open all night and Sundays is also very much larger in this country. This comparison demonstrates that, in wire and office facilities for conducting the business of telegraphy, the people of this country have a very great advantage over those of any country having a government telegraph system.

In the last report of the British post-office administration accessible to the writer, the progress made in ten years under government control was noted with not a little pride. The increase presented was: in miles of line, 17,507; in miles of wire, 51,861; in number of offices, 2843; and in number of messages, 20,017,147. In ten years ending with June, 1882, one company in this country shows an increase of 69,027 miles of line; 237,178 miles of wire; 6831 in the number of offices; and 26,379,748 in the number of messages. Thus the progress of a single company in this country shows a growth in one decade fourfold greater than that of the British postal system in length of lines; nearly fivefold greater in length of wire; more than twofold in additional offices, though the increase in the number of messages was only twenty-five per cent. greater than in Great Britain. The result is precisely what might have been expected—that the telegraph having kept pace in this country with the growing demand for its use, and the increased exactions for prompt transmission, there is a very much better service rendered in this country than under any government administration.

SERVICE.—Mr. Hueston, for many years connected with the telegraph service of the New York Associated Press, and who has probably sent and received more telegrams than any other patron of the business, says:

“It has been enforced upon my conviction by twelve years of intimate acquaintance with the business in America, and six years of continuous experience in the same business in Europe, that the average time of trans-

mission on the Western Union Company's lines is shorter than on any system in Europe, or in any country in Europe; and that the number of errors made by American operators is much smaller than by European operators; and, in these respects and all others connected with the practical part of the telegraph service, the private companies have made steady and continuous improvement, while the tendency in Europe is to stagnate or to retrograde."

He adds, from the result of his large experience :

"Commercial messages of ordinary length, in the busy time of the day are about two hours between Paris and London offices, exclusive of time of delivery. Between Antwerp or Brussels and London, about the same delay. Between Bremen or Hamburg and London, the time is about one hour. These are short and mostly single circuits, the delay arising entirely from meagerness of facilities. The average time between New York and London is far quicker than between Paris and London. A week's business, taken at random from messages transmitted by day and by night, yields the following results, the time in every case being the difference between time of filing and time of receipt on the instrument in London: Twenty-three messages from Rome average two hours and forty-three minutes; thirteen messages from St. Petersburg average one hour and fifty-six minutes; twelve messages from Vienna average one hour and forty-six minutes; seven messages from Brussels average one hour and ten minutes; thirty messages from Berlin average one hour and seven minutes; fifty-eight messages from Paris average one hour and one minute; thirteen messages from Amsterdam average fifty-six minutes. Telegrams from Constantinople average about four hours; from Madrid, take anywhere from one to five hours. The messages on which the averages are struck do not vary much from a total of forty words."

What would the commercial people of this country think of that kind of service? The time required for the transmission of messages between the great commercial centers of this country has been reduced to from one to four minutes; and between the great produce exchanges and boards of trade, to fractions of one minute.

In accuracy we are far in advance of the government systems. In this country, complaints of errors and mishaps average one for every five thousand messages sent, or the fiftieth part of one per cent.; while one scarcely ever receives a message on the other side of the Atlantic that has not some "error," requiring a guess at the word intended. Complaints are unavailing, as governments acknowledge no responsibility. Some months ago, a writer in "Blackwood's Magazine" filled ten pages with samples of errors on the European lines which had fallen under his observation; and the London "Times," in a lengthy article

declared the Government telegraph a failure, and pointed out the great want of accuracy and lack of public accommodation. Nearly all the great inventions and improvements in the art of telegraphy, within the past thirteen years, have been made in this country and under the stimulus of private enterprise.

RATES OF TOLLS.—There is no greater mistake than the popular declaration that telegraphing is very much cheaper in Europe than in this country. On the contrary, it is very much more expensive. The minimum rate of one shilling in Great Britain, and a sum in other European States equal to about twenty-five cents of our money, for messages between all points within each country, carries a very small volume of business a little greater distance than it can be transmitted here at as low a rate. But there is a considerable telegraph business done in this country at a ten-cent rate and a larger amount at a rate of fifteen cents; while for long distances the rates in this country are very much lower than in any part of Europe. The following table exhibits the rates per word from London to the several countries enumerated:

Austria.....	700	miles,	9	cents	per	word.
Belgium.....	200	"	4	"	"	"
Denmark.....	500	"	8	"	"	"
France.....	200	"	5	"	"	"
Germany.....	500	"	6	"	"	"
Holland.....	200	"	6	"	"	"
Italy.....	800	"	10	"	"	"
Norway.....	700	"	8	"	"	"
Roumania.....	1200	"	10	"	"	"
Russia in Europe.....	1400	"	18	"	"	"
Switzerland.....	400	"	8	"	"	"
	6800	"	92	"	"	"

Paris is about the same distance from London that Boston is from New York. We charge for a message between New York and Boston (and indeed all points in New England) twenty-five cents, which message with date, address, and signature free, averages seventeen words. A like message between London and Paris would cost eighty-five cents. Vienna is about the same distance from London as Chicago from New York, between which latter points our rate is fifty cents. From London to Vienna, a like message would be \$1.53. To St. Petersburg, which is about

the same distance from London, that Omaha is from New York, the message would cost \$3.06 against our rate of seventy-five cents.

The maximum rate in this country for carrying a message from Halifax, N. S., to Washington Territory, a distance of 4000 miles, is \$1.50 for an average of seventeen words. It is difficult to find a comparable service in Europe that does not pass through long cables belonging to private companies; but the government land rates united would be four times as much as our rate. All international messages are charged at word rates, which are much higher for long messages than the combined local rates. Hence there does not appear any reason for public complaint of the cost of telegraphy in this country.

One of the strongest arguments for a government telegraph has been that the telegraph system throughout the country should be made a unit, under one general direction. Undoubtedly this would contribute to the improvement of the public service, and yet one of the very grounds of complaint is that one company has done so much toward unifying the telegraph service.

DANGERS.—The argument for the monarchical governments of Europe controlling the telegraph was, that as an element of power it was a great protection against the plots and schemes of disaffected and opposing elements or parties. These elements, threatening the stability of the Government, could not be allowed the advantages of the telegraph, and dare not use it. The peace of society and the prosperity of the country are involved in the stability of the Government and the security of its rulers. The genius of our Government is, that the people rule; it is, therefore, averse to the administrative power, for the time being, having any such advantage in directing or controlling the popular will. The telegraph would not only double the power, by way of patronage, of the Post-office Department, but would give the administration party immense advantages in warmly contested elections. Who can say that sooner or later there would not be an espionage of telegrams instituted? But, even were it administered with the most sacred impartiality and inviolability of the privacy of messages, the opposing party would never believe it was so administered, and would not venture to use it in the private arrangements for the prosecution of the contest.

It is scarcely probable that any administration of the telegraph will ever render entire satisfaction to everybody who uses it. That the government administrations have not done so may be further shown by the following extracts, the first from an article which appeared in the London "Times," and the second from a speech by John Pender, Esq., M. P., whose opinions are entitled to the highest consideration, and whose capacity and opportunities for forming a correct judgment in the premises are equal to those of any man living.

The "Times" article says:

"It can hardly be doubted but that, if the telegraphic wires of the country were in the hands of private companies and were administered by private enterprise, instead of being a government monopoly, the public would gain largely in rapidity, cheapness, and extension of telegraphic communication. It appears more than doubtful whether the monopoly given by Parliament, and the purchase by the Government of the telegraph lines in the United Kingdom, have not proved to be errors, and whether the time will not shortly arrive when the administration of telegraphs should be taken out of the hands of the Government and again intrusted to private enterprise."

Mr. Pender says:

"I have thought it desirable to refer to my visit to America, and say something about the Western Union system, because it is a system which is, probably, in its efficiency, only to be compared with our own system in England, which is worked by the Government, with this difference, that being worked as a private enterprise, and being stimulated more or less by competition, I think the Western Union have shown greater results during the last ten years than our system has under government management. I think the science of electricity has received more encouragement and been more developed, and the reduction of rates has, during that time, also been greater in America than in England; and, altogether, I think it would be well if our Government took a leaf out of the book of the Western Union Company."

It is hoped that the Government and people of this country have not entirely forgotten that sage maxim of President Jackson: "That country is governed best which is governed least."

NORVIN GREEN.

JOHN BROWN OF OSAWATOMIE.

WHETHER John Brown was right in his invasion of Virginia, in 1859, is a question upon which good men may always differ. The movement was designed to excite insurrection among slaves, which in a legal sense may have been treason against the State. A number of men were killed, and a jury found the old commander guilty of murder. A rebellion that is successful is always washed clean of the stains of bloodshed and treason; but where the revolt is checked in its beginning, the leaders usually suffer immediately, and, for one reason or another, their names are seldom greatly honored. To John Brown the fates have been unusually kind. His story fell upon a time when the world was eager for a hero, and when the people of the northern United States must make one of whatever material came to hand. It will be remembered that we were ready, early in the war of the great rebellion, to worship General Scott, or General McClellan, or Sigel, or Fremont, or Grant,—anybody who would show any activity or earnestness in fighting the South, or any real hatred of slavery. To hate slavery, and to be ready to fight, these were the virtues in those days that, especially in New England's eyes, covered a multitude of sins. Here was a man who had fought slavery for years, in Kansas, in Missouri, in Virginia, and had died a martyr to his principles. The very fact that he had fought unlawfully added to his glory. No doctrine has ever been dearer to New England than the doctrine of the "higher law." This is an invisible and unwritten law which each man must find for himself, read and interpret for himself, and obey in his own way. If it leads him to disobey certain human enactments, so much the better; if it even leads him to treason and rebellion against his country, *he* at least is right, however wrong his acts may seem in the eyes of men. The acts of John Brown fitted this doctrine admirably;

indeed, he himself was no mean exponent of it, either with voice or pen. His defense of himself was on this line wholly. He had resisted "bogus" laws in Kansas; and the laws of Virginia sanctioning slavery were bogus also in his view. He was above all such laws; he had done right in breaking them; he had done no wrong even in killing men, because his motives were good. He scouted the idea of insanity, and he set his individual judgment against all the law books of Virginia, and staked his life on the issue.

The attitude was heroic. The man bore himself like a hero from the time his schemes failed till his death; and every word that he spoke was in such perfect accord with the doctrine of the higher law, that every sentence thrilled New England as though a prophet were speaking the very words of God. There arose in his defense, and to sing his praises, a company of men and women whose peers did not exist in America. They have made our history and written it, and they have made our literature. They made the public sentiment that abolished slavery. They held the pen that awakened those who bore the sword that preserved the Union. When these men said, John Brown is a hero and a saint, the bravest and the cleanest of all the heroes of ancient or modern times, there was nothing for it but to accept the verdict.

It was not accepted hastily. Very many newspapers lamented the affair at Harper's Ferry as extremely unfortunate; and "fanatic" and "crazy old man" were the terms commonly applied to the old hero for fully a year after his death by all except those who were known to hold extreme antislavery views. But during the war all was changed: these extremists became our trusted leaders, and their version of the John Brown affair became accepted history, and, as such, it has passed into encyclopædias and biographical dictionaries, not only in this country, but in England and Europe. The war has now been over for nearly twenty years. A new generation is upon the stage reading and thinking, and the deeds of Old John Brown have a new interest as they pass again under review taking the form of final history. It is a time of revaluation of our war heroes, and some will gain in our estimation, and some, no doubt, will lose. This younger generation that is weighing, and sifting, and revaluing the deeds and characters of the men of twenty years ago may not love truth more than those who made the records that

we read, but they probably need heroes less. The *Zeit-geist* has now more to say of science and fact, than of right or valor. Not that these latter terms are meaningless, nor that there is forgetfulness of what they signify, nor indifference toward such conceptions in ethics or qualities in men; but the keenness of interest now is all in the direction of getting at the exact facts of every case, let them be what they may.

Under the influence of this spirit there has been a growing impression that the deeds of John Brown do not warrant all the eulogies that have been pronounced upon him. Emerson spoke of him as the "saint whose martyrdom will make the gallows glorious like the cross."* Thoreau said, "He could not have been tried by his peers, for his peers did not exist." Theodore Parker wrote from Rome, "Brown will die, I think, like a martyr and also like a saint. . . . None of the Christian martyrs died in vain; and from Stephen, who was stoned at Jerusalem, to Mary Dyer, whom our fathers hanged on a bough of 'the great tree' on Boston Common, I think there have been few spirits more pure and devoted than John Brown's, and none that gave up their breath in a nobler cause. Let the American State hang his body, and the American Church damn his soul, still the blessing of such as are ready to perish will fall on him, and the universal justice of the infinitely perfect God will take him welcome home. The road to heaven is as short from the gallows as from a throne, perhaps also as easy." These men were the radical abolitionists of the time, to be sure; but as has been already said, their words and sentiments were adopted during the war period by the entire North, and since then largely by the civilized world.

But to the average citizen of to-day such extravagant eulogy of a doubtful character is distasteful. The mention of the name of John Brown no longer brings down the house, and for two or three years a spirit of doubt has been slowly spreading eastward from Kansas whether the man deserves any eulogy whatever. John Brown was a disturbing influence in Kansas from the first. He went to the territory not as a settler, but to fight. His voice was always for war, and he probably was more anxious to fight Missouri than to make Kansas free. Those who had gone to Kansas to make homes and build a State naturally felt very dif-

* As quoted in Redpath's *Life of Brown*, page 4. The present writer would be glad to know that Emerson did not use just this language.

ferently. They would fight if it became necessary in support of their principles; or in defense of their rights; but a general war with Missouri, or the South, was last and least among the things desired or hoped for.

It will be remembered that the first territorial legislature was elected fraudulently by voters who actually lived in Missouri. This body of law-makers assembled first at Pawnee in July, 1855, but immediately moved to Shawnee Mission, near the Missouri border, where they completed their labors in a proslavery atmosphere and in the most shameless proslavery fashion,—establishing the entire code of Missouri as the laws of Kansas and adding whatever beside they could think of that they believed would aid in the establishment of slavery in the territory. These were the “bogus” laws resisted from the first by the Free State party, but they received in due time the approval and sanction of President Pierce. Then it became a very serious question what was to be done. A few extremists were in favor of resisting these laws to the bitter end, even to the point of fighting United States troops. But the wiser and more moderate policy of submitting for the present and fighting out differences at the ballot-box finally prevailed, having all along had the support of the very best citizens, even the most earnest abolitionists. John Brown was among those who scouted the voting policy and urged an armed resistance to the fraudulently enacted laws. Not that his voice was heard in the councils of the time, as he was then an unknown and unnoticed man, but it was afterward remembered that he had always been numbered among the revolutionists. The leaders of this fighting party, so far as it can be called a party, were not citizens generally but correspondents of Eastern newspapers, and people who, in various ways, lived upon money sent from the East to help make Kansas a free state.

On the 21st of May, 1856, occurred what is known in history as the sacking of Lawrence. The Free State Hotel was shot through with cannon balls and afterward burned. The two Free State printing-offices were destroyed, many private houses pillaged, and that of Dr. Robinson, then “governor,” according to the Topeka or Free State faction, burned. This was done by a band of nearly eight hundred men, partly United States troops commanded by Federal officers, but largely a mob of men from nearly all the Southern States, who had come on their own account to “wipe out the abolition town.” There was no resist-

ance, and nobody was killed except by accident. A peace policy had been resolved upon and was strictly carried out by the Free State men, though it cost them heavily that day.

While these events were taking place in Lawrence, two companies of riflemen were being organized in the adjoining counties of Franklin and Miami to come to the defence of the ill-fated town; these were the Osawatomie company, commanded by a Mr. Dayton, and the Potawatomie company, whose captain was John Brown, Jr. Both companies started for Lawrence, and they met on the way and continued their march all night. On the morning of the 22d, old John Brown was with these armed men near Palmyra, within twelve miles of Lawrence. It is not quite certain whether he started with one of the companies or whether he met them on the way. On this Thursday morning they heard that Lawrence had fallen on the day before, and were undecided most of the day whether to go forward or return. It was toward the evening of this day, in the camp of his son's company on Ottawa Creek, that old John Brown called for volunteers "to begin the war in earnest." He wanted only brave men, and men who would obey him implicitly. There was hardly any response to this call, perhaps not a single man answered. But the old warrior was not to be baffled. He had five sons present and a son-in-law; these, at least, he could command. John, Jr., however, protested against the movement, saying that the men could not be spared, as they were now near the enemy. Then the other four sons, Owen Brown, Watson Brown, Frederick Brown, and Oliver Brown, and the son-in-law, Henry Thompson, went into camp by themselves, with their father and captain, and spent most of the next day (Friday) in grinding their sabers. About noon, old John Brown went to a man by the name of James Townsley, who was in one of the rifle companies, and who had a wagon and team, and asked him if he would, with his wagon, take a company of men back to the Potawatomie that afternoon. Townsley agreed to do so, not knowing what was to be done. So, at about two o'clock they started, with their rifles and revolvers all loaded and their swords newly sharpened. It is said that they were cheered on their departure by the rifle companies, which is not unlikely, as the nature of their expedition was not known. John Brown, Jr., however, said, "Father, be careful; do nothing rash." Townsley had in his wagon only the Brown family, including the son-in-law, Thompson. There

was another man in the company, whose name was Winer, who rode a pony; whether he had volunteered and agreed to obey or not, we do not know. It is not probable that any of the men at this time knew exactly what they were going to do. It was the Brown family obeying their father, as in duty bound, with a teamster in their employ and a neighbor joined to the expedition, probably because it was going toward his home.

When they camped that night they were near the Potawatomie Creek, and here old John Brown revealed his plans for the "war." He asked Townsley to guide them up the creek some four or five miles, into the neighborhood where he lived, and show them the houses of all the proslavery men, saying that it was his intention to sweep the creek as he came down of all the proslavery men living on it. Townsley refused to become even the guide of any such expedition. On account of this refusal the party staid in camp all that night and the next day, talking the matter over. It seemed to Townsley, and probably also to some of the other young men, that this sort of killing was murder. Old John Brown urged that it was necessary as a war measure: it was time for the war to begin in earnest; war there must be to abolish slavery; God had foreordained him to begin it. Once a decisive blow was struck, the fatal peace policy inaugurated at Lawrence would be at an end, and the Free-State men would be obliged to unite and fight Missouri. The end of the matter was, that late on Saturday evening Townsley yielded, either to force or argument, and acted as guide upon an expedition much less extensive than had been originally planned, but sufficient, surely, to cover the name of John Brown with infamy forever.

The first victims of this murderous foray were found in a family named Doyle, residing on Musquito Creek, which empties into the Potawatomie. Here Townsley, Winer, and Frederick Brown remained outside the house, while the Captain and the rest of his family entered and brought out James P. Doyle and his two sons, Drury and William. These "prisoners" were taken along the road toward "Dutch Henry's" for about two hundred yards. Here the Captain gave the order for their slaughter, but it was either misunderstood or disobeyed. Old John Brown then himself drew his pistol and shot the father, James Doyle, in the forehead. Watson and Oliver Brown then fell upon the younger Doyles, and William fell dead at the first cut of one of those murderous heavy sabers. Drury Doyle started to run to

the house, but was overtaken by his assailant and cut down. There was a younger brother of the Doyles, then sixteen years of age, in the house, whose life was spared at his mother's tearful entreaty.

From this place the "Northern army," as the commander styled the little band, proceeded down the creek to the house of Allen Wilkinson, which was entered in the same manner and by the same men. Mrs. Wilkinson was at the time sick with the measles. When the men rapped at the door, she begged her husband not to open it. The men outside asked him to come out and show them the way to Dutch Henry's. He replied that he could tell them just as well without opening the door. The Browns then commanded him to surrender in the name of the "Northern army," and to open the door or they would break it open. The door was opened, and four men entered and searched the house for arms, taking a gun and powder-flask. They then told Mr. Wilkinson to put on his clothes and go with them. He protested, saying that his wife was sick, and that he would remain at home and be ready to answer to any charge against him whenever wanted. Mrs. Wilkinson entreated, but the Captain said, "It matters not," and marched her husband away, without even giving him time to put on his boots. He was killed about one hundred and fifty yards from the house by the younger Browns, acting under the Captain's orders.

At about two o'clock in the morning the party reached Dutch Henry's Crossing, and knocked at the door of a house where were four men sleeping and a woman and children. The names of the men were James Harris, William Sherman, Jerome Glanville, and John S. Whiteman. The "Northern army" announced itself as usual, commanded surrender, inquired about other proslavery men, about arms, saddles, horses, and whether the men present had ever aided proslavery men in coming to the Territory, or done the Free-State party any harm, or intended to do it any harm. Satisfactory answers were received from Harris and Whiteman, and they were allowed to remain where they were found. William Sherman was killed in the same manner as the younger Doyles and Wilkinson. The horrible gashes made by the broadswords or sabers of the Browns gave rise to the story that the victims were mutilated; but there is no reason to think that the bodies were hacked or cut after life was extinct. The "Northern army" now, with a single prisoner, Jerome Glanville,

retraced its steps to the camp of the previous evening, where the wagon and horses had been left. They breakfasted there and remained in camp till nearly noon.

As the early light of that Sunday morning, May 25, 1856, came over that new land, so lately a wilderness, showing here and there at wide intervals a cabin, with a little field of planted ground, it revealed five ghastly corpses lying in the grass. Two widows, with their fatherless children, were weeping over their dead. They knew then what the world does not know even yet, that this was the work of John Brown. And the same morning light found the stern commander of the army of seven in camp with his men and prisoner. As he lifts his hands to heaven to ask a blessing on the food, the "dried" blood of his victims is seen upon them by the prisoner. The prisoner was set at liberty during the morning, but was a little too free in what he said about the Browns, and was shot not long afterward, near Black Jack, while on his way to Kansas City in a wagon. His death was, of course, attributed to the Browns, but this is not clearly established, and probably never can be. He may have been mistaken about the blood on the old man's hands as a literal fact, but the stain upon his character from that night's work can never be washed away. And it ought not to be forgotten, overlooked, nor forgiven. It is right at this late day to publish it to all the world, and let the story have its full effect upon the young who are forming their estimate of the man.

The story as here related is true beyond a doubt in all essential particulars. It rests upon the testimony of no single witness, but upon the perfect agreement of many. Its truth was confessed by Brown himself explicitly upon one occasion, implicitly many times. The killing of these men was never attributed to anybody else, and nobody in Kansas doubts that it was done under John Brown's authority.

The community at first was startled and shocked by the reports of these midnight murders. Old John Brown and his company of seven arrived at the camp they had left on Ottawa Creek about midnight between Sunday and Monday after the assassinations. The news was known there the next morning, and John Brown, Jr., immediately resigned his command of the rifle company, mounted his horse and rode away home. He was soon after arrested for this crime and severely used, it is said, being driven, chained, many miles in the hot sun until he became

insane. His father used to show the chain in the East on his money-raising excursions, and showed great emotion in narrating John Junior's sufferings and consequent insanity. He may well have shown emotion. That son suffered for his father's crime, which at that very time he was hiding and denying. Insane, a raving maniac, for awhile John Junior certainly was, as his fellow-prisoners testify. And the form of his raving was all connected with this affair. "When the conversation turned, as it sometimes did, upon the Potawatomie murder, and we attempted to excuse his father for that act, giving the mitigating circumstances current among the Free-State men at the time, his eyes would sparkle with unwonted brilliancy, his manner would assume the wildest excitement, and, in a loud and boisterous voice, which was uncommon to him, he would exclaim: 'Do not attempt to offer anything in palliation of such a crime. Nothing can excuse it. It was unequalled in atrocity and displayed only cowardice. Had the same deed been done in open day it would have shown more manliness, but to call men from their beds at midnight and to cut them down in cold blood is infinitely more savage than was the chopping in pieces by a drunken rabble of R. P. Brown at Easton.' And thus he would run on for a long time, much more vehemently than we can possibly describe." So speaks G. W. Brown, a fellow-prisoner, in the "*Herald of Freedom*" for November 5, 1859. The condemnation of old John Brown in this is a little too methodical for madness, it may be; but there are other witnesses that his ravings were like this in substance.

The effect of these murders was very great upon the community and on the fortunes of Kansas; but it was not at all what the commander of the "Northern army" anticipated. He expected to precipitate a revolution; but instead of this, the abolitionists of Lawrence, even, almost unanimously denounced the deed. Public resolutions were passed concerning the matter, lamenting it as most unfortunate. The Missourians, however, came on, inflamed with righteous wrath, hunting old John Brown and his boys, ready to shoot them at sight. Frederick they did shoot thus, and they burned the cabins of all the Browns and all their kin, drove away their stock, and took vengeance upon them in whatever ways they could. Brown's resistance, and how he fought at Black Jack, are well known. It is not generally understood, however, that all this fighting at Osawatomie and Black Jack grew out of the Potawatomie

assassinations. The impression was really made in the East at the time, and has prevailed since, that the Potowatomie affair was in retaliation for these abuses and outrages committed upon the Browns by the Border Ruffians. But our theme now is not so much the effect of this affair upon Kansas as its bearing upon the character of Brown himself and its importance as a factor in making up our judgment concerning his career and greatness. Still, if the result of those murders had been good, and had that good been foreseen and foretold by Brown, it would be something in his favor. But this cannot be said. What Brown thought he foresaw never came; there was no revolution, and not a slave was freed. Only evil to Kansas resulted, so far as can be judged with any sort of certainty.

The effect of this crime upon the character and career of old John Brown was pervasive, decisive, overwhelming. After that night he knew that his life was forfeit; and he fought, and begged, and planned with a desperateness born of his danger. He could not live in Kansas, he could not live safely or peacefully anywhere. He must fight on to the end now. The Rubicon was passed. He cut off his long beard, probably as a disguise, and sought help in New England, reciting the woes of his family, but concealing their cause. His desperate earnestness won the confidence and the hearts of some of New England's greatest and noblest men. Had they known fully what he was and what he had done, or even what he intended, they would not have armed and helped him as they did.

In 1857, it was believed in Kansas that there was a secret plot for the massacre of the members of the Lecompton Constitutional Convention. This convention was very odious to the Radical wing of the Free-State party. Old John Brown was at the time hovering on the border of Missouri, in Iowa, waiting for a signal to come and assist in the bloody work. The plot was discovered and failed, and again Brown was disappointed. Such a plot, had it been executed, would have been in the line of his plans and expectation. Such was his idea of beginning a war against the South. After this failure, he ventured again into Kansas, and made a sudden raid into Missouri and captured some slaves, which he took safely to Canada. A peaceable and unarmed man was killed on this excursion—not intentionally, it is said. But Brown referred to the matter in his dying speech, and said these

slaves were freed without harm to any one, "without even the snapping of a gun." His accounts of his exploits before his Eastern friends, never modest, were seldom truthful. The real hero of Black Jack was Captain Shore. Osawatomië was not a victory, but a defeat of the Free-State party, and no particular bravery was shown by anybody. Old John Brown ran away in time to save his life, which was all well enough; only there is a popular impression that he did great things at the "Battle of Osawatomië." That fight, the pillage, and the burning were in consequence of his crimes, and for the whole he deserves censure rather than praise.

At the time of Brown's execution in Virginia, which was called in Boston his public murder, while the deluded abolitionists were exalting to the skies a man they did not know, a Free State paper, "The Herald of Freedom" of Lawrence, was printing the plain unvarnished truth about him and begging the Republicans of America not to make a hero of him. Boston replied: "Of course, the *small men* in Kansas can see no greatness in Brown. Those who live near a hero never know him, he is often rejected by all of his generation. The distant view is the true view. Here we get the man in true perspective and his greatness is clear as sunlight." Against these generalities we will not argue, for they doubtless contain a measure of truth; but as applied to Brown they are fallacious wholly. Viewed in the largest possible way, there is little that is admirable in this man's character; and if our civilization is worth anything, his entire public or fighting career is to be utterly condemned. It was right for Free-State citizens in Kansas to defend their homes; but old John Brown never had a home there to defend, and his influence led most of his sons to early graves. It may have been justifiable to steal slaves from their masters and free them; such is the writer's opinion; but in this sort of work Brown never acted with any discretion, not even with common good sense, if freeing the slaves had been his chief object. But his real object, from the fatal night on the Potawatomië till his death, was to provoke the South and to commit the North to violence and bring on a war. He did not do it; and, dispassionately weighed after twenty years, the verdict of thoughtful men must be that his influence in bringing on the war that afterward came was infinitesimal. That war was brought on by Northern votes and Southern secession. The war sentiment caught up the name of

Brown and glorified it, but the man himself was all wrong in principle and practice.

His principles were those of the Russian nihilists—first make a clean sweep of the present civilization, and let the future build what it can. Surely such a man is not a proper hero for the youth of our country to worship, and we believe that as his true history, too long concealed, becomes known, admiration for him will be changed to disgust, and disgust to anger, that we have been so long deceived.

DAVID N. UTTER.

SOLAR PHYSICS.

A PROCESS is always going on among the various branches of Physics not very different from that which obtains among the various tribes of men. Just as the latter are gradually becoming civilized and passing under the yoke of law, so the former are, in their way, gradually submitting to discipline and passing under the yoke of rigid mathematics. Acoustics, light, and heat were long ago brought in, and quite recently electricity has been forced into submission by the united labors of Faraday, Maxwell, Thomson, and others.

There are, however, two formidable tribes of scientific varieties which have hitherto persistently hung around the borders of scientific civilization, not submitting to anything like proper restraint, and these are the inhabitants of the very big and the very little. The former concern themselves with the movables of the earth, which they drive about in a capricious and inexplicable manner, putting us often to much inconvenience and very great loss. The latter have to do with the almost infinitely small—with molecules and atoms, which they conjure about after a manner that defies our powers of mathematical analysis. Meteorology and chemistry are the names by which we designate these two classes of phenomena; and, however important and interesting may be the preliminary advances that have been made toward their subjugation, it certainly cannot be said that either has been content to pass under the yoke. Now the statement may sound strange, but yet there is reason to think that both of these will yield most readily if approached from the side of solar inquiry.

The sun's surface is a platform on which gigantic meteorological displays are continually taking place, and it is likewise a laboratory in which chemical changes are brought about of a nature which we, on this earth, are utterly unable to imitate, perhaps even to comprehend. Nor is it merely as distant specta-

tors that we must regard the sun, beholding through appropriate instruments these gigantic processes and deriving instruction from the sight. We must look to him as the heart and soul of our system, believing that what takes place there will speedily affect ourselves; and thus it happens that solar inquiry is not merely a branch of speculative physics tending to throw light on certain outstanding problems, but likewise a deeply interesting subject of great practical importance. Our readers will thus perceive that there are two sides to solar physics. There is first what may be called the elder branch, treating of the large or molar motions which take place on the sun's surface, and there is next the younger branch, which concerns itself with the sun's chemical changes, a branch which has recently been greatly advanced through the labors of Kirchhoff, Janssen, Lockyer, and others. We will confine our remarks to solar physics on the large scale, giving our readers an account of the greater visible phenomena of the sun's surface and of the variations of these; and concluding with some remarks on the effects which solar changes appear to produce upon the earth's surface and upon ourselves.

Soon after the invention of the telescope, the existence of black spots on the sun's surface was rendered certain through the observations of Galileo, Fabricius, and Scheiner; and their behavior was speedily made use of in order to prove the rotation of the sun around his axis in a period of about twenty-six days. But the first methodical observer of these phenomena was the late Hofrath Schwabe, of Dessau. Fifty-five years ago he set himself to the task of obtaining, every clear day, sketches of the sun which might approximately record the positions and sizes of the various groups of spots. For more than forty years he continued to labor at this task with true Teutonic perseverance, until at length his exertions were rewarded by the discovery of the unmistakable periodicity of these phenomena. During some years he found the sun to be almost free from spots, while on other occasions the disk was marked with very frequent groups, the period from maximum to maximum, or from minimum to minimum, being nearly eleven years. From the observations of Schwabe and others, it would appear that 1828, 1837, 1848, 1860, and 1870 were years of maximum outbreaks; while 1833, 1843, 1856, 1867, and 1877 were characterized by a nearly total absence of spots. We are probably now approach-

ing, or about to pass through, a period of maximum, after emerging from one of minimum frequency (1877) of a continuance quite unprecedented. Carrington followed in the steps of Schwabe, and his observations give us a very accurate record of the spots which appeared from 1854 to 1860 inclusive.

To Rutherford and De La Rue the credit is due of introducing solar photography, by means of which observations of unimpeachable accuracy can now easily be made. Already a very large number of solar photographs has been obtained in various places, as may be seen from a catalogue published by the English Government in the Report of a Committee on Solar Physics. This scattered information should be gathered together and utilized as speedily as possible.

But it is now time to tell our readers what a sun spot really is. Professor Wilson, of Glasgow, made in 1774 an observation which at the time greatly startled the scientific world. He found that sun spots behaved exactly as if they were caverns with sloping sides dug into the body of the sun. To enable the reader to appreciate this argument, we ought to state that a typical sun spot consists of an intensely black inner nucleus surrounded by a less black border. Now, the sun revolves on his axis in about twenty-six days, the motion being from east to west. A spot therefore will take about thirteen days to travel across the visible disk or hemisphere of our luminary, and will come on at the left-hand border or limb and disappear at the right, provided always it continues to exist so long. Now Wilson noticed that, when a spot is near the limb, the penumbra on the side nearest the sun's visual center is hidden from the view, on the same principle, he contended, which makes us, when looking into a silver jug, for instance, from one side of it, see only that side which is furthest from the eye, the side which is nearest being hidden from the view. In fine, he imagined that sun spots were caverns, of which the umbra formed the bottom and the penumbra the sloping sides. We may add that they are certainly cloud-pits and not caverns in solid matter. The conclusions of Wilson have been abundantly verified by Mr. De La Rue and his colleagues, who have likewise shown that the bottom of a sun spot is blacker than the general solar surface because it is colder, and that it is colder because it is caused by a down-rush of comparatively cold matter from the more elevated regions of the solar atmosphere, just as a terrestrial hailstorm

coming down from above would appear black because it was cold, if the earth were to shine by its own light.

Now, a down-rush implies an up-rush, and a down-rush of comparatively cold matter from above implies an up-rush of comparatively hot from matter beneath. We might therefore expect that sun spots would be supplemented by complementary phenomena presenting a peculiarly bright appearance. Such are found in the *faculæ* (*torches*) which almost invariably accompany spots, at least when they are of considerable size. And we have evidence from various quarters that these bright patches are high up in the solar atmosphere, and that they have made their way upward from beneath. They form, in fact, the up-rushes of hot matter of which we have been theoretically in search.

Sun spots are, as we have stated, only occasionally present on the surface of the sun, and we have now to add that they confine themselves to definite solar localities, being grouped more or less strictly round the equatorial regions and never by any chance appearing at the poles. There are, nevertheless, analogous phenomena on a smaller scale which are quite generally distributed over the whole surface. This, when viewed through a powerful telescope, is far from uniform in luster, and is seen to be made up of very numerous and small black and bright patches, which cause it to present a mottled appearance. Sir William Herschel was the first to remark this, and he further believed the *pores*, as he called them, to be of the nature of small spots, a conjecture which recent research with the spectroscope has abundantly verified. It thus appears that the solar disk presents us with two scales or orders of similar phenomena. We have, in the first place, the minute black and white patches generally distributed over the surface, while, on the other hand, at selected times, and in selected regions, we have spots and *faculæ* on a scale frequently gigantic. But whether small or large, we cannot err in regarding the black patches as representing down-rushes of comparatively cold matter from above, and the bright patches as representing up-rushes of comparatively hot matter from beneath.

Here it is evident that we have been hitherto describing phenomena as they appear projected upon the luminous disk of the sun; and although we know that the umbra of a spot is low down and the facula high up, how low down and how high up we shall find it difficult to decide. Suppose, however, that we now

turn from the disk itself to the region round about it, might we not expect the tops of the ascending currents to project themselves into this region and to stand out boldly beyond the sun's visible limb? In this region, however, we are at first sight prevented from observing anything on account of the glare of light which surrounds it, this glare being caused by reflection from the earth's atmosphere. Now, there are two ways of getting rid of this glare. One is by means of a total solar eclipse, during which the sun's light is withdrawn from the earth's atmosphere; the other is by using the spectroscope, which has the power of diluting the glare while it cannot so dilute the light of the solar up-rushes. By such means we see the up-rushes standing out like red flames from the limb or border of the sun, often with fantastic shapes like columns or trees of fire, extending also on rare occasions to the height of a hundred thousand miles above the sun's border, and moving at the enormous rate of a hundred and fifty miles per second. If we add that a large sun spot is capacious enough to swallow up fifty or sixty masses equal to our own earth, our readers will have some faint conception of the scale of these phenomena. It would thus appear that a minute study of the sun's surface increases, at first sight, rather than diminishes the astonishment and perplexity with which we regard the doings of our luminary. We are presented with two wonders instead of one. It has of course been long a standing puzzle, by what means the sun has been able for many millions of years to pour out continuously an amount of light and heat so vast that the imagination can hardly grasp its measure. And now, in addition to this, we have to account for these gigantic up and down rushes which observation reveals in the solar atmosphere.

It is, however, a hopeful sign when such wonders go in couples, for then we may use the one to explain the other; let us, therefore, see what we have got before us in the present instance. We are first induced to ask, by means of what wonderful machinery is the sun enabled to dispense continuously for millions of years its enormous outlay of light and heat? Then, secondly, what can be the meaning of those gigantic up and down currents which take place in the solar atmosphere? The reply is, these gigantic currents form the very machinery of which we are in search, and enable the sun to do his duty. For, let us reflect what is necessary in order that our luminary

should continue to give out light and heat. In the first place, if the sun were merely a hot solid, like incandescent carbon, it has been calculated by Sir William Thomson that his surface would grow cool in a few minutes. It is quite clear that the state of things must be very different from this. The sun is a citadel of light and heat, and has an incessant warfare to wage with the deadly cold of space, and the conditions of this celestial warfare are not very different from these with which we, on this earth, are only too well acquainted. Now, a fortified position may be perfectly filled with men, all of them armed with muskets; but they may be so crammed together that, when the front row have fired their shots, they cannot move backward, while the row behind cannot move forward to take their place. In such a case the result is not difficult to foresee—a total collapse will very speedily be brought about, because the conditions essential to success have not been attended to. There are, in fact, too many men. It is the same with the solid sun; the front row of particles give out their light and heat, and there they remain, being unable to do anything more themselves, but preventing, at the same time, the row behind them from doing anything. Now this will never do. The front particles, when they have fired their light and heat shots, must have the means of promptly retiring to recruit themselves from the inexhaustible magazine within, while the row behind them must promptly take their place, and when they have done their duty retire in their turn to make room for another row, and so on. The more vigorous this transport service, the more effective will be the result. Now in the up and down rushes, we have this transport service visibly represented, and the astonishing activity of the sun in giving out light and heat is only equaled by the astonishing activity of this service; in fact, the one necessarily implies the other. Our readers are, however, not quite satisfied. They see well enough that these gigantic currents are quite essential to the sun's well-being, but they would like to know how they are brought about; the bellows blows up the fire, but who or what works the bellows? Does the fire work it? Now, before explaining this, it will be necessary to define what we mean by a *convection current*. Were we to try, by boiling oil or by other means, to heat a vessel of water from the top, we should find that the heat would penetrate with extreme slowness beneath the surface, because the heated particles, being expanded and becoming specifically lighter, would

remain where they are, namely, at the top, and would not give place to others. But when we heat such a vessel from beneath, the case is quite different, for the heated particles, getting specifically lighter, ascend and give place to others which descend; there is thus a continuous supply of cold particles constantly ready to take away the heat. Now, these upward currents of hot and downward currents of cold particles are called convection currents. The same thing takes place in a furnace fire: the hot air, becoming specifically lighter, mounts up the chimney, while its place is supplied by cold air, which pours itself into the fire. Stop up the chimney, destroy the circulation, and the fire will cease to burn.

Let us now examine on what this process called convection really depends. In the first place it depends upon the force of gravity, for it is in virtue of this force that light air ascends and heavy air moves downward. If, therefore, we were suddenly and in a mysterious manner deprived of a large portion of the earth's interior, we should find that our chimneys would not draw so well. Secondly, connection depends on the amount of expansion caused by an increase of temperature; thus, for instance, convection currents would be more violent in air than in mercury, because mercury expands comparatively little and air a great deal. Thirdly, it depends upon the magnitude of the temperature differences which are taking place; and, lastly, it depends upon the scale of the arrangement, so that a short chimney would not draw so well as a long one. Now, all these requisites come together in the sun. For in the first place, the force of gravity is there very great, being about twenty-eight times greater than it is at the earth's surface. Secondly, the substance there present is gas, which has a high expansive faculty. Thirdly, the temperature differences are enormous; and lastly, the scale of the whole is very great.

There is thus much reason for believing that convection currents must be of prodigious strength and magnitude in the sun; such currents, too, would be necessarily up and down ones. We cannot, therefore, go wrong in assuming that the gigantic up and down currents which we there behold are due to convection.

To conclude, the sun's radiating power is in a sense due to convection currents, and these currents are in a sense due to the sun's radiation; in fine, these two things support one another, and so the arrangement goes on briskly, and the sun continues to

pour out light and heat. It will be noticed that we have said nothing whatever about the cause of the sun's heat, nor do we intend to do so; sufficient for our purpose that there exists in the interior of the sun a vast store-house of heat, which can be drawn upon as required, and brought to the surface.

It is thus sufficiently obvious that the sun's heat and light-giving power is intimately associated with the gigantic solar currents which observation reveals. Now this association is no doubt of a quantitative as well as of a qualitative nature; that is to say, if, from some cause, no matter what, these currents are at any time particularly powerful, we may expect the solar radiation to be particularly powerful likewise. There is, in fact, a strong analogy between the sun and an ordinary steam-engine. In both, heat is conveyed from a source of high to a source of low temperature, and this carriage is in both accompanied by a great display of visible energy. In both, too, no doubt the more rapid the carriage of heat the greater the visible energy. The difference between the two is rather one of object than of machinery. In an ordinary steam-engine, the object is the production of visible energy, while the means are the carriage of heat; in the sun, however (we trust metaphysicians will pardon us), the object is the carriage of heat, and the means are the production of visible energy. Be this as it may, we think it may safely be assumed that, when the solar currents are most powerful, solar radiation is most powerful likewise. Now, all observations, whether telescopic or spectroscopic, go to convince us that the currents of the sun are most powerful during times of maximum sun spots, when the outbursts of visible energy on and around the disk are of a scale and intensity absolutely overwhelming, and we are therefore inclined to believe that on such occasions the intensity of solar radiation will be found to be most powerful likewise.

But here, at length, we come to the mysterious part of our subject. We can fancy it acknowledged that the sun's heat-giving power depends upon the intensity of these visible currents; but then it will naturally be asked, why should this vary from year to year?—why should it exhibit an eleven-yearly period, or, indeed, any period at all? The reply to this question is still obscure. In the first place, we may be sure that this periodicity of sun spots, whether true or only apparent, must be caused either by something within the sun or by something without. Now, there is plenty of energy within the sun to account

for any manifestation, however tremendous; but we can form no conception of any agent present there capable of causing periodicity. Besides, we never can expect to know much about the sun's interior; so that assigning the cause of sun-spot periodicity to these regions appears to be only a way of giving up the question altogether.

If we go now to the regions without the sun, we find there planets and certain comets which are strictly subject to periodical laws. On this ground, therefore, we might appropriately look to them as the causes of solar variability, were it not that we have great difficulty in imagining how such comparatively small bodies, so far off, can account for those enormous manifestations of energy exhibited in solar phenomena. It is possible that this objection may be got rid of by our defining more strictly what we mean by a cause. If we mean that planetary action causes sun spots, after the manner in which a blacksmith causes his hammer to strike the anvil, we certainly are not justified in our statement. But if we mean that planetary action causes sun spots, after the manner in which a man who pulls a delicate hair-trigger causes the explosion of a cannon, there is no *a priori* reason why this may not be true. Our limits forbid any lengthened discussion of this interesting but mysterious subject; we may, however, state that several observers have obtained preliminary evidence of some kind of connection between planetary positions and sun-spot frequency. It must, however, be borne in mind that if we are to resort to planetary action as a complete explanation of solar periodicity, we must assume the existence of intra-mercurial planets or matter, inasmuch as the configurations of the well-known planets are not enough to account for the various solar periods.

We have thus come to the conclusion that, waiving all speculations as to the cause of these periodical phenomena, there is reason to believe that, both with respect of currents and of heat-giving power, the sun is most energetic at times of maximum sun spots. But here it may be said, why trust to indirect inference? Why not determine this by some direct measurement of solar radiation? With great regret and not a little shame, we have to confess that no trustworthy information on this point has hitherto been obtained; indeed, it is only quite recently that suitable attempts have been made to determine this essential point by means of direct observation. Indirectly, however, we may

examine certain terrestrial processes depending on the sun, and endeavor to find out whether these are more or less energetic at times of maximum sun spots.

The phenomena most suitable for this purpose are those of terrestrial magnetism and meteorology; let us now, therefore, commence with the former, and endeavor to ascertain whether the sun's action on the magnetism of the earth is strongest or weakest at times of maximum sun spots. The sun may be said to affect the earth's magnetism in two ways. First, by causing magnetic disturbances or storms, accompanied by auroral displays and earth-currents; and, secondly, by producing daily oscillations of the magnet. A few words are necessary as to what these affections really mean. For this purpose we may imagine a delicately suspended magnetic needle to be swung in a vault removed from all currents of air or changes of temperature due to the sun; or, better still, let us imagine a dozen such magnets to be so swung in various quarters of the globe. Now, on certain occasions it will be found that all these dozen magnets are in a state of tremor or oscillation, not extremely violent, but yet sufficiently marked to be easily perceptible. If the place of observation be in a high latitude, and if the sky be cloudless, and it be night, the aurora borealis will at the same time manifest itself, and the various telegraphic systems of the earth will be disturbed by spontaneous earth-currents. Such, then, are magnetic storms or disturbances, with their auroral and earth-current concomitants. Now, these storms are most frequent during years of maximum, and least frequent during years of minimum sun spots. In the next place, the sun produces a small diurnal oscillation in the position of the needle, in virtue of which it attains, in this hemisphere, its extreme easterly position about eight in the morning and its extreme westerly about two in the afternoon.

This affection of the needle is not, of course, simultaneous at the various magnetic stations, since it depends upon the hour of the day. In this respect, therefore, it is quite different from magnetic disturbances or storms. Now, it is well known that the range of this diurnal oscillation is greatest during years of maximum and least during years of minimum sun spots. It thus appears that, both as regards magnetic storms and diurnal magnetic ranges, the sun is most powerful at times of maximum sun spots.

We come next to the meteorology of the earth. Here it might naturally be supposed that the evidence of solar variability should be more distinctly visible in the meteorology than in the magnetism of our globe; the reverse is, however, the case. We can, indeed, hardly doubt that the meteorological facts support the magnetical ones; but we are forced to acknowledge that the former are at present more cogent than the latter. For the purpose of reviewing the meteorological evidence, let us very shortly consider in order the four following elements: barometric pressure, rain-fall, wind force, and temperature. We may probably regard it as a sufficiently well ascertained meteorological fact that, during the summer, the pressure is particularly low in the interiors of large continents and comparatively high at sea; while, during winter, we have the reverse of this, the pressure being particularly high in continental interiors and particularly low at sea. Now, it is natural to suppose that this peculiar distribution of pressure should be more pronounced when the sun's radiation is powerful than when it is weak; and, as far as our present evidence goes, it appears to show that this barometric seesaw (as it has been called by Blanford) is stronger during years of maximum than during years of minimum sun-spot frequency. So far, then, the meteorological evidence supports the magnetical.

The same thing may be said of rain-fall. Dr. Meldrum, of the Mauritius Observatory, has shown that at a great number of stations the annual rain-fall is larger at times of maximum than at times of minimum sun spots, a result which has been confirmed by observations of rivers and lakes. He has likewise shown that there are most cyclones in the Indian Ocean in years when there are most sun spots, and fewest cyclones when there are fewest sun spots; and M. Poëy has pointed out a similar connection between the hurricanes of the West Indies and solar phenomena. On the whole, the meteorological elements of pressure, rain-fall, and wind agree with those of magnetism in representing the sun as most powerful at times of maximum sun spots, although the meteorological is not so strong as the magnetical evidence. Observations of temperature would, however, appear at first sight to tend in the opposite direction, and to show that the sun is least powerful at times of maximum spots, inasmuch as temperature is, generally speaking, lowest on such occasions. But Smyth and Blanford have shown that a

low temperature is the concomitant of a heavy rain-fall and a large amount of clouds. If, then, the rain-fall be greatest at times of maximum sun spots, it would seem to follow that the temperature might then be lowest.

On the whole, we may conclude, with much probability, that the magnetical and meteorological processes of the earth are most pronounced when there are most sun spots, and this would seem to indicate that the sun's radiation is strongest on such occasions—a conclusion quite in conformity with the results of direct solar observation.

We have thus endeavored to establish the truth of our opening remark, that terrestrial meteorology has much to gain from the pursuit of solar inquiry. We cannot justly say that meteorology is receiving very little support. Meteorology is like an intelligent youth who is being generously nourished in order that he may run errands and make himself useful about the house. Meanwhile, however, his education is being almost entirely neglected, and his future prospects are in great danger of being sacrificed to his present serviceability. It is time that something should be done to prevent this, and on these grounds we venture to think the Report of the Solar Physics Committee will be welcome to all true lovers of meteorological progress. This Report advises that joint action should be taken by the disciples of the three cognate sciences of magnetism, meteorology, and solar physics, and concludes with the following words, which we cannot do better than repeat:

“We have no hesitation in expressing our belief that the continued careful study of solar phenomena will prove to be of the greatest scientific value, and that there is no reason for doubting that the advance of true knowledge in this direction will, in some form or other, and sooner or later, prove to be of real practical value also, as all experience has shown that it has been in other branches of human knowledge.”

BALFOUR STEWART.

MODERN EXPLOSIVES.

EXPLOSIVES are of very different degrees, both as regards pressure and effect. By pressure is meant the effort of the expansive gases measured by the strain upon the confining envelope; and by effects, not only the amount, but the kind of work.

Gunpowder may be exploded in the open air; or in the bore of a cannon; or it may be so strongly confined as to be exploded in its own volume. In the first case, the resistance to the escape of gases is due to the atmosphere; in the second, to the ball and to the atmosphere; in the third, no escape of gases being practicable before complete combustion, the pressure becomes the greatest possible for this kind of explosion. If, in the three examples given, the weights of powder being the same, all of the material be perfectly burned, the quantities of heat developed will be equal, as well the stored up work of the products of combustion. But the kinds of work done will be very different. In the first instance there is motion and disturbance in the air, spread over a large space; in the second, the explosion being partially confined under pressure and directed against the ball, would project it with a high velocity to considerable distances; and in the last case, the pressure developed would first perform work upon the elasticity of the confining envelope and, if the cohesive strength failed, would burst it. The latest experiments upon gunpowder exploded within the limits of its own volume furnish the following data: Pressure upon a square inch, 6400 atmospheres, or forty-two tons; and temperature of combustion, 3992° Fahrenheit. This substance is composed of two combustible ingredients, charcoal and sulphur, and a third, niter (potassium nitrate), which furnishes oxygen to support the combustion. It requires a considerable disturbing force to disengage the oxygen of the nitrate for combination with the carbon

and sulphur; hence powder does not belong to the class of quick explosives. Sulphur inflames at a much lower temperature and gives more heat than charcoal, and is valuable in aiding the combustion of the powder and for increasing the elastic pressure of the gases.

When a charge in the bore of a gun is first ignited, the flame spreads rapidly over the surface of the grains, developing in the first few instants of time a large amount of gas before the projectile has sensibly moved from its seat, and thus causing great strain upon the metal of the gun. When it became necessary to increase the calibers, and particularly to construct heavy rifled guns, the size of the grains was largely increased, and by this means the total surface exposed to flame in the first instants of combustion was largely decreased, and also the production of gases. However, so long as the combustion proceeds from the outside to the center of the grains, large developments of gases take place while the ball is still near the bottom of the bore, becoming continually less as it moves toward the muzzle. General Rodman, of the United States Ordnance Department, was the first to suggest a remedy for this by pressing the powder in cakes perforated with holes, so that the surface of combustion should increase as the projectile was moving in the bore. The strain upon the gun was thus decreased, and it also became possible to increase the charge and the velocity of the shot. These cakes were finally made hexagonal, and fitted each other in the chamber with a minimum loss of space.

Powder in this form, called "prismatic powder," has been adopted for heavy rifled guns in Russia and Germany. To obtain increased space for charges, the bottom of the bore has of late years been enlarged, or chambered. Large-grained powder is now made of regular shapes, to fit close, so that like charges shall occupy the same length of bore for the same powder and caliber of gun; and it is evident that attention to this, as well as to the quality of the ingredients and to the process of manufacture, was necessary to produce uniform rates of combustion and of development of gases under the same circumstances, and thus secure standards of comparison. Without such precautions, it would have been impossible to have obtained anything like uniformity of pressures or to have estimated with any certainty the strength of metal required in the gun; so that great care and research devoted to improvements in the manufacture of

gunpowder have been essential elements of success in the production of the large calibers now used in ordnance.

The introduction of heavy rifled guns has not only materially changed the construction of ships of war, but has also modified sea-coast forts and batteries, which now must be placed at greater distances from the commercial or naval depots to be protected, must possess greater resisting power, and must afford the emplacements necessary to the service of the largest artillery. Inland fortifications must likewise be placed at increased distances from the cities and depots, in order to counteract the operations of sieges, now essentially modified by the use of long-range rifled guns. With the addition of torpedoes to sea-coast defenses, neither the use of armor nor the heaviest artillery will suffice to give the advantage to ships of war in combat, provided the forts and batteries, for the protection of torpedoes as well as for their own defense, be well armed with heavy armor-piercing guns.

Gunpowder, for the important functions of war, has not been supplanted by the quick and violent explosives of later invention. On the contrary, it has been found necessary even to decrease the quickness of gunpowder in order to obtain satisfactory results from large cannons. This material is used for all calibers of artillery, large or small, for small arms of precision, and for the bursting charges of shells. It still holds an important place in military mining during the operations of sieges, although some of the quicker explosives will find here a portion of the field fitted to their special properties.

A great need is felt for some explosive powerful enough to burst with effect the heavy armor-piercing projectiles, so as to rend the sides of an iron-clad ship. The cavity in these is too small for a charge of gunpowder capable of producing the requisite effect. Neither nitro-glycerine, gun-cotton, nor dynamite No. 1 could be used as a charge in the cavity of the projectile, from the risk of exploding before the shot leaves the gun, thus rendering it unserviceable. The new substance, gelatine dynamite, or explosive gelatine, from its remarkable indifference to shocks and general insensibility to causes of explosion, joined to its extraordinary explosive strength, may furnish valuable results in this direction.

An illustration of different degrees of explosion has already been furnished in the three examples of confinement of gun-

powder, but varieties of action far more striking are developed in the comparison of gunpowder with the more violent explosives. Gunpowder ignited under confinement so strong as to resist bursting until the maximum pressure is attained, burns, owing to the confinement of the heated gases and the pressure generated, with much more rapidity than when the substance is fired in the open air ; nevertheless, in comparison with some other explosives, this action is slow.

Materials whose chemical decomposition takes place with extreme rapidity have the effect of crushing rocks and breaking hollow projectiles into an inconceivable number of small fragments, the elasticity of the resisting mass not having time to come into play. Action is exerted in a special manner upon the surrounding gases, the molecules of which are urged forward with a rapidity out of all proportion with a possible change of place of the surrounding medium ; and in consequence the molecules of gas tend to accumulate, driven upon one another, and to produce the effects of a strong, unyielding confinement. It is a common remark of those who use the high explosives, that the surrounding atmosphere acts like a resisting wall. These considerations furnish the interpretation of the extraordinary local effects of the explosions of this class of substances. A small quantity heaped upon an iron plate will perforate it as if pierced by a bullet ; arranged along a line across the width of the plate, it will cut it in pieces ; wrapped around an iron column or a tree, it will shear it. Palisades, stockades, and barriers yield to its action, and walls and houses are prostrated by it. But the very strength of these explosives forbids their use in cannons ; and in a shell filled with the highest form of explosives, it is found that the minute fragments into which it is broken would render it comparatively harmless against troops. Professor Abel tested the effects of a very small charge of gun-cotton suspended in the cavity of a shell filled with water ; this medium, conveying the normal pressure of explosion to each square inch of the cavity, really multiplied the effect of the quantity of explosive used. The shell was broken into a much larger number of fragments than by the filling of the entire cavity with gunpowder.

Cartridges of quick explosives may be detonated at certain distances from each other by the explosion of one of them. In water, this transmitted explosion is practicable at much greater

intervals than in air. The experiments instituted in 1876, in preparations for the demolition of the reef at Hallett's Point, showed that submerged cartridges of dynamite of the weight of one pound, inclosed in a wrapper of paper, were exploded by sympathy from the action of a similar amount of the substance at distances of eighteen feet, and when confined in stouter envelopes, at much less distances.

These modern explosives are applicable in submarine operations on account of the rapidity of their decomposition, with which the water, though in contact, cannot interfere. This is not the case with gunpowder, of which it is stated that the precaution of multiplying the number of points of ignition will not produce an explosion of the whole quantity under water. This, together with the superior explosive strength of the former, has caused the preference to be given to them for use in torpedoes, as well as in submarine blasting.

The term "burning" is especially given to progressive combustion, and the expression "detonation" is reserved for rapid and almost instantaneous combustion. The action of gunpowder is an instance of the former, and the decomposition of the high explosives, produced by mercuric fulminate, of the latter.

After the discovery of nitro-glycerine and gun-cotton, great difficulties were at first experienced in developing their full effect. Heat naturally was first applied; but as these substances would burn freely in the open air without explosion, confinement within a resisting envelope became necessary to produce the proper result. A cartridge of gunpowder, used as a primer, was successful in exploding the nitro-glycerine, but not the gun-cotton. M. Nobel finally employed mercuric fulminate for this purpose, and by its use, when confined in certain quantities within a metallic cap, all of the explosives of this class are detonated, except explosive gelatine, for which a particular primer is necessary.

M. Berthelot explains the detonation of these substances by a primer of fulminate as due to the heat evolved by the primer, and to the shock of its detonation, also converted into heat, acting upon a small portion of the explosive compound, which is sufficient, under existing pressure, to decompose suddenly into gas the portion in contact; and the next portion receiving the violent shock of these gases, the decomposition, by repetitions of this process, is almost instantaneously transmitted throughout

the mass. He relies entirely upon the conversion of a blow or shock into heat, and *vice versa*, according to the theory of thermodynamics, for the explanation of the phenomena of explosion from the shock of fulminating compounds and other sources. Professor Abel holds that the explosion of one substance by another is more easily effected when the vibrations of the latter are synchronous with those of the former in a high state of tension; or, in other words, that ethereal waves of heat may be assisted by sonorous waves in producing the result. According to M. Pellet, the explosion of detonating bodies should be attributed to a particular vibratory motion which varies with their constitution and properties, and which can act independently of heat and the shock of gases produced by the explosion of the primer.

Compressed gun-cotton, dry and wet, and dynamite, laid in trains with the disks or cartridges in contact, gave for the transmission of the explosion, when detonated at one end of the train, the following rates: for dry cotton, 17,500 feet per second; for wet, 20,000 feet; and for dynamite, 21,600 feet, showing an immense superiority over the rate of combustion of gunpowder. It has been stated that the decomposition of explosives varies in quickness from the combustion of gunpowder to the detonation of the most rapid compounds; and it may be added that, for the latter substances, their decomposition may be effected between the limits of a perfect detonation and of an imperfect explosion possessing but little power. The reaction started by the first shock from the primer in a given explosive material is propagated with a rapidity depending upon the intensity of that shock, which thus determines the character of the whole explosion.

Fulminate caps, as long as they are of sufficient size to originate a reaction of great rapidity, are properly called *detonators*. Mercuric fulminate, used particularly for this purpose, gives a shock more violent and sudden than any other substance—a result due to the greatness of the pressure it develops when detonated in its own volume, nearly 40,000 atmospheres. Nitro-glycerine, dynamite, and air-dry compressed gun-cotton are detonated with mercuric fulminate. Wet gun-cotton requires a primer of the dry kind, itself detonated by the fulminate. Explosive gelatine is detonated by a special primer of nitro-hydro-cellulose mixed with nitro-glycerine. Nitro-glycerine

in the frozen state requires a larger primer of the fulminate. Granulated dynamite in the frozen state is detonated with the fulminate, but frozen in compacted cartridges it requires a primer of a soft cartridge detonated by the fulminate. Dynamite is not readily exploded with a primer of gunpowder. Nitro-glycerine is readily detonated by percussion. Dynamite and gun-cotton are not very sensitive in this respect. Professor Abel states, as the result of experiments conducted by himself, that all explosives, including gunpowder, are susceptible of violent explosion through the agency of various detonating primers; that a sufficient detonating charge will produce the full explosive effect of gunpowder in the open air without close confinement, and the same effect when submerged, without the use of the strong cases required for complete ignition in the ordinary way.

Nitro-glycerine is formed by the action of a mixture of sulphuric and nitric acids upon glycerine. The compound formed is a substitution product, several atoms of hydrogen in the glycerine having been replaced by equivalents of nitric peroxide. This compound owes its explosive sensitiveness to the comparatively feeble union of the oxygen and nitrogen in the peroxide, and a slight disturbing cause brings into play the stronger affinity of the hydrogen and carbon for the large store of oxygen contained in the new compound. It congeals between 40° and 45° in the pure state. It is of the greatest importance that in its manufacture the nitro-glycerine should be freed of acids; otherwise, it will decompose if kept, and during this process may be dangerous to handle.

Dynamite No. 1 is formed by the intimate mixture of an infusorial earth, kieselguhr, with nitro-glycerine, the proportion by weight being twenty-five per cent. of this earth to seventy-five per cent. of nitro-glycerine. It congeals at about 45° . Many other inert earths and substances have been used to form dynamites, but their absorptive capacities do not equal that of the kieselguhr. Various other mixtures have been made with nitro-glycerine which are well known in commerce, and which, therefore, need not be described—in most, a mixture of potassium or sodium nitrate and wood fiber, charcoal, or other form of carbon, and sometimes sulphur, with the addition, usually, of an absorbent.

Gun-cotton is prepared from cotton fiber treated with a mixture of sulphuric and nitric acids. The action of the nitric acid

upon the fiber makes a substitution product, gun-cotton, by the displacement of several atoms of hydrogen with equivalents of nitric peroxide. The fibrous gun-cotton is afterward very finely divided by machinery, and reduced to a pulpy state in water. It is then compressed, under pressures of four to six tons upon the square inch, into disks or other forms, and may be kept indefinitely in a wet state, saturated with water, without danger of explosion from accidental causes. It does not contain oxygen sufficient for perfect combustion, and in consequence gives out a poisonous and inflammable gas, carbonic oxide, which renders its use objectionable in large quantities, under ground, as in military mines. To remedy this defect, Professor Abel recommends the material to be impregnated with a solution of potassium nitrate. This product has the strength, but not quite the quickness of explosion, that belongs to pure gun-cotton.

Tomite, as manufactured at San Francisco, is a mixture of gun-cotton and nitrate of baryta, and forms a useful blasting powder.

Explosive gelatine is formed from nitro-glycerine and soluble gun-cotton, about ninety per cent., by weight, of the former and ten of the latter, with the addition of a small percentage of camphor to render it insensible to shocks, concussion, and other causes of accidental explosion. Of all combinations known and applied to practical use, it is said to be the most powerful. It may be preserved intact for an indefinite time under water, in this respect differing from dynamite, which rapidly loses its nitro-glycerine when so exposed. It never gives off nitro-glycerine under extreme pressure. It is unaffected by violent shocks and vibrations, and even by explosions close to it. If, in addition to these properties, it prove to be a substance stable in character, there is no reason why it should not, for military and even for industrial purposes, where great explosive strength is required, supersede all of the quick and powerful explosives in common use.

From what has been said here regarding the properties and modes of action of the several explosive substances, it appears that there is no agent which can take the place of gunpowder for the principal requirements of warfare. In blasting rock, the quicker explosives have generally the advantage in point of economy of money and time, and this is especially the case in tunneling and in submarine blasting. However, in rock weak in

cohesion, without seams where the gases might escape in large amount, and also in breaking down cliffs, as, for instance, to furnish stone for the construction of breakwaters, gunpowder still holds its old place. It is also necessary in coal mines, in order to get out large masses of the material; and in quarrying massive blocks of stone for building purposes, it is generally preferable. Nitro-glycerine is proscribed on account of its sensitiveness to exploding causes and its liquid character. Dynamite and gun-cotton are most useful in blasting, and particularly the former, on account of its plastic nature permitting it to be pressed into close contact with the sides of the hole. Both of these explosives are used in torpedoes and in military submerged mines, the dynamite, however, for reasons already given, being used in a granulated form.

The rapid and strong explosives are very useful in hasty operations for the destruction of abattis, palisades, stockades, barriers, and other military obstructions, and they form a regular part of the *matériel* in foreign armies. They serve likewise to remove walls, houses, and other cover for an enemy; to destroy with celerity bridges, particularly iron trussed railway viaducts; and in various ways, not necessary to mention, are useful in attack and defense. In industrial uses, they have perforated mountain ranges to open rapid communications between nations, have removed rocks and other hard obstructions from the channels of rivers, and destroyed submarine wrecks. They have been applied to break up the subsoil to depths of six to ten feet, to aid the growth of trees. They have removed masses of cast or wrought iron which accumulate below the tap-holes of cupolas or form in the crucibles of blast-furnaces. They have broken up ice dams interfering with navigation and producing inundations. They have sometimes been used in felling trees; but this is not expedient, except for hasty military operations to deprive an enemy of cover, or to create an obstruction to his advance. They are effective in removing stumps from fields and from the channels of rivers. The gigantic operations of blasting which have opened lines of communication by land and by water would probably never have been undertaken but for the discovery of the quick explosives. For unlawful uses, to serve the purposes of assassination and destruction of property, they can be applied only upon a limited scale and with nearly fruitless results, as experience has already fully demonstrated.

Attempts in this way, made on a large scale to force social changes and overturn governments, would require both time and money and an elaborate plan of operations, which could not pass without detection and suppression, unless favored by organized masses of people sufficient in numbers and power to initiate revolution and war.

JOHN NEWTON.

CONVERSATIONS WITH A SOLITARY.

PART III.

SCENE as before. Alison and Franklin are sitting together after luncheon.

FRANKLIN.—How the day has changed since the morning! The sky has become like lead, and—yes, I thought so—there is a spot of rain on the window. A sudden blight seems to have fallen upon everything. One would almost fancy one was looking at a different world.

ALISON.—I foresaw something like this as we were coming up from the rocks. The wind had shifted even then, and the trawlers, as you noticed, were being got ready for sea. How pleasant the breeze sounded, flapping the red sails!

FRANKLIN.—I was thinking less of the sails than of the sailors. What fine, bold faces, and what muscular chests and arms! If your grottoes of this morning might be the homes of Greek sea-nymphs, these Jersey fishermen might well be the descendants of vikings.

ALISON.—They not only might be: they very probably are. All the same, I am surprised to hear you say so.

FRANKLIN.—Surprised? May I ask why?

ALISON.—Because, according to your ideas, they might as well be the descendants of counter-jumpers. It is surely the Radical view that descent is nothing more than an accident. I am surprised, too, that a Radical should think it any praise to a fisherman to say of him that he looked as if he had a monster like a king for his father.

FRANKLIN.—Kings would not be monsters, they would be models, if they really were the fathers of fishermen; and when our next Royal Highness asks to be settled in life by the nation, I would willingly support a parliamentary grant to him of a fishing-smack. However, to be serious: as regards the question

of descent, Radicals are by no means so irrational in their views as you imagine them. Hereditary qualities they acknowledge and would utilize; all they object to is hereditary prestige. A healthy father and mother will have, probably, healthy children; but if you wanted an active laborer, you would not employ a cripple merely because he happened to be born of muscular parents. It is precisely because we believe so strongly in natural distinctions that we are resolved as soon as possible to do away with artificial distinctions.

ALISON.—The question is, how far do natural distinctions descend; or, how far, in other words, do artificial distinctions coincide with them? So far as political capacity goes, you and your party think they do not coincide at all. I was surprised, therefore, at a man, who ridicules the idea of a race of hereditary politicians, taking so naturally to the idea of a race of hereditary sea-farers.

FRANKLIN.—I am glad you have brought me back to the point we started from; but, in the first place, let me set you right about one thing. No Radical denies that the son of a great politician may, in many cases, inherit his father's talents; and when this happens every Radical will be delighted. Practically, however, such an event is an accident; and I certainly do call ridiculous any social institutions which presume it as a certainty. With regard to these Jersey fishermen, the question is different. Physical peculiarities descend far more calculably than mental. High cheek-bones are inherited, when high thoughts are not; and you can tell the son of a Chinaman more easily than the son of a genius. But if you ask me to explain seriously the allusion which I made just now to the vikings, I was thinking of something far more certain than the heredity of any congenital qualities whatsoever. Let us hold what views we will as to birth, we can none of us doubt the results of early habit and education.

ALISON.—On the contrary. The results of education are to me doubtful in the extreme.

FRANKLIN.—I am not speaking now of the education given in board-schools; though if we were, I should be well prepared to defend it. I am speaking of the education that comes from the practice of any calling, and the results of it, in that sense, even you must admit to be calculable. Now it is quite true that I have never seen any vikings; but we all of us have at least some conventional notion of them; and if these fishermen struck

me as being like their descendants, it was because they struck me as the inheritors of a very similar education. Of course, that chance fancy of mine is in itself not worth talking about; but the truth that lay at the bottom of it is one of the first importance. Of the physique of the fishermen, something, no doubt, is due to race; but even of that, not all; while, as to their other characteristics, education may claim nearly the whole of them. Do you remember that huge man, with the red handkerchief round his neck, whom we both of us just now noticed, as he sang, while arranging his nets, what sounded like some Norse sea-song? Well—his blue eyes, his fair hair, and his stature—these, no doubt, he had as a birth-right from his parents. But his cheeks of ruddy bronze—to what did he owe them? To his parents, or to the sun and the sea winds? While, as to his hardihood, his endurance, his presence of mind in the face of special dangers, his insensibility to many things that to other men would be intolerable,—still more plainly does he owe these not to birth, but to education. Suppose that same man had a twin brother, brought up in a city office, who went daily to and from his work in an omnibus, and spent his evenings at a music-hall or in the pit of a theater. How different even in look, still more in character, would the clerk be from the fisherman! Nature to each would wear a totally different aspect, each would meet it with a different front and feelings—with a different standard of what is painful, neutral, or pleasurable; so that what to the fisherman is a healthy life and livelihood, would be first a terror and then death to the clerk. You may be sure that the clerk, had I met him in our morning's walk, would, in spite of his birth, have suggested few thoughts to me of the vikings.

ALISON.—Perhaps not. All the same I believe that such a clerk as you speak of would have all his brother's special faculties dormant in him; and that a few weeks' experience of the ancestral life would show him possessed of every ancestral aptitude. I do not mean that in so short a time he would have mastered all the details of a fisherman's special knowledge, or that he would prove to have been born with a chart of the coasts of Jersey, ingrained like a strawberry-mark in his soul's inner consciousness. I speak merely of those striking general qualities, such as courage, presence of mind, and physical endurance which you attribute to his brother.

FRANKLIN.—You mean that there would exist in him, solely in virtue of his parentage, and wholly apart from early example and education, a natural taste for the sea, a natural indifference to and familiarity with its perils, and a natural callousness to the hardships of wave and weather?

ALISON.—Such is my faith in the virtue of pure blood, no matter whether it be that of fisherman or aristocrat. Surely you ought to agree with me—you, who are a disciple of Darwin.

FRANKLIN.—The importance of what you call pure blood, whatever it may be in the case of pouter pigeons and race-horses, is less in man than in any other animal, and is confined almost to his lower and less human qualities. Amongst the civilized races, at all events, its effects are hardly appreciable, when compared with those of education. Did not the scholars and saints of the Middle Ages rise continually from the rank of serfs and peasants? Even feminine beauty, which no doubt does run in families, owes much to similarities in post-natal circumstances; and what foolish novelists call the “patrician type” buds, though it may not blossom, among the families of the people. But to come back to the fishermen. Can you think, even for an instant, that any man who has never experienced hardship can be born insensible to it? Will one who has held a pen all his life in an office acquire suddenly the horny hands of a sailor? Will one who has been sheltered from every draft of air and from every shower not feel intolerable the squall and the driving foam? These things to the fisherman, though not pleasant, are merely part of the wear and tear of existence. He climbs the mast as indifferently as his brother, the clerk, mounts an omnibus; and he has the same sort of liking for the sea that his brother, the clerk, has for London. But why? Not because he is his father’s son, but because he has been his father’s companion; and that character which you think he inherits, it has really taken years of a special life to fabricate.

ALISON.—According to your view, then, if some half dozen brothers were adopted from the cradle by as many different foster-parents, they might be so brought up as to present no trace of any common relationship, either to the same actual parents or to the same class. They might be different, not only in tastes, in habits, and in thoughts, but even in physical capacities and constitutions. Different kinds of food, different modes of life, would be pleasant to them. To the palate of one anything but

Château Margaux might be distasteful; to the palate of another, anything but gin or beer. One might be a sailor with a frame, as you say, insensible to what we call hardship; another might be so organized that he would really feel as a hardship what would, to most men, be merely the absence of a luxury.

FRANKLIN.—Of course, as I said before, descent, though not much, is something. Some children are born cripples, or idiots; here and there, again, is an infant Hercules. But taking the average of mankind among the civilized races, I should say that in their cradles all classes were equal; and that the average baby, whether born of peer or peasant, was the raw material out of which peer or peasant might be made.

ALISON.—And you think this truth so clearly proved, that a person like myself can be blind to it through class prejudice only?

FRANKLIN.—I have no wish to overstate the matter. I think it possible for a man, quite apart from prejudice, to believe in inherited differences somewhat more than I do; but when these are compared with the differences produced by education, I believe that, apart from prejudice, no one would think them great enough to be of any practical importance, still less to justify any formal recognition of them by society.

ALISON.—And supposing a man—myself, for instance—to have got rid of his prejudices, and thus to see the question as you do, you believe that, if he is honest and logical, he will become a Radical, as you are?

FRANKLIN.—I do believe so, most certainly. As for prejudice, or what Herbert Spencer calls the class-bias, the extent to which it hides social truths from us is notorious; nor do I wonder at its effects, nor in all cases blame the sufferers from them. Still, when you gravely tell me that a man brought up as a cockney would, simply because he was born of a long line of sailors, prove a seasoned sailor himself the moment he set foot in a fishing-smack, I must confess that you seem to be intentionally allowing your prejudice to run away with you; if, indeed, I am really to believe you serious.

ALISON.—My dear fellow, that's the very thing you are not to believe. Of what I said to you about the clerk and the sailor, prejudiced as I am, I did not mean a word.

FRANKLIN.—It tends, perhaps, to make discussion a little difficult, if one of the disputants is reasoning from a proposition which he admits to be meaningless.

ALISON.—Don't be offended. I was not playing the fool with you. I merely told a lie, that I might draw from your own lips as strong a statement as possible of what I, like you, think the truth. There are certain claims, no doubt, which I should make for birth, and which you would disallow. But compared with the claims of education they are, as you say, insignificant; and for argument's sake I will cede them altogether. Yes, education, — we are not talking, remember, of schools, but of the education that comes of all formative experience — the education of board and bed, the education of business, of labor, and of association, — education in this sense of the word is indeed the main power which fashions the raw human material, if not into different characters, at least into different classes. I grant you all this, I say, for argument's sake; I grant you most of it for the sake of truth; and yet, for all this, I am not a Radical.

FRANKLIN.—You mean that, in spite of what you have just now admitted, you are still an advocate of hereditary rank and privilege? You think it right that some men should feel themselves born to rule and others born to submit? I can conceive your maintaining that the son of a rich father is, from superior opportunities, more likely than the son of a poor man to acquire capacities for government. Myself, I should demur even to this; but you, I conceive, mean more than this. You mean that not only is the son of a rich man better than the son of a poor man; but that the descendant of ten rich men is better than the son of one.

ALISON.—I do; though I should allow, with the utmost liberality, for exceptions.

FRANKLIN.—And yet you admit that, on the average, in our cradles we all are equal; and that the baby who numbers twenty earls as his ancestors, is not socially different from the baby of a village grocer.

ALISON.—For argument's sake I admit it. You need not look at me so suspiciously. I am perfectly serious now. All are equal when they are babies crying in cradle. I admit this; and you wonder I am not a Radical. When babies govern us, and when society consists of babies, I will become one instantly — then, but not till then.

FRANKLIN.—That is well enough for a retort; but retorts are not arguments.

ALISON.—On the contrary, whether it be a retort or no, it is an argument of the gravest and most matter-of-fact kind.

Let me put my own position a little more plainly before you. Here we are—having come there by another route—at exactly the same point where we broke off our discussion this morning. I maintained, if you recollect, that those feelings between class and class, which are somewhat analagous to those of lord and vassal, and which it is the main desire of you Radicals to eradicate, are in reality the very soul of national life; and that, though as time goes on they will naturally undergo many changes, to destroy them would be to destroy civilization.

FRANKLIN.—Am I to take you literally? or are you again trying to play upon me?

ALISON.—I am trying to be as sober as possible, and to speak with as little exaggeration.

FRANKLIN.—You think, then, that to abolish the House of Lords would ruin the trade of England, and make us all once more savages?

ALISON.—The House of Lords is but a sign of our civilization; our trade and wealth in themselves are merely the soulless body of it.

FRANKLIN.—Our civilization, I think, must be in a bad way, if the House of Lords is a sign of it.

ALISON.—You are now doing what a moment ago you said I was. You are using retorts, not arguments. Why should you be angry or irritated with me? Bear with me patiently, at least till I have explained my meaning, which as yet, I fear, I must have done very imperfectly. With regard to the House of Lords, I can conceive of its being abolished, or of its powers being modified, on the most conservative grounds. The significance and the effect of its abolition or its continued existence will, either of them, depend entirely on the grounds on which it is attacked or defended. I must, however, run the risk of annoying you by saying that, should it be abolished on the grounds which are put forward by you,—should its abolition, if it took place, indicate the triumph of your special principles,—its abolition would, in my judgment, be a sign of a gradual relapse on the part of England into barbarism. Let me put the matter more plainly yet. I was not speaking of the House of Lords nor thinking of it; it was you who brought it into the conversation. Since, however, I responded to your implied challenge about it, I must tell you in what spirit I spoke of the House of Lords, not in any way as a part of the English constitution, but as a

convenient symbol of the structure of English society ; and, regarding it in that light, what I have to say is this : The reason for which I mainly value it is the very reason for which Radicals mainly hate it. I value it because it is a symbol of the loyalty of class to class — of submission on the one side, and care and patronage on the other ; because it is a public, a national acknowledgment that men are not equal, but that some are born to serve, others to rule ; and that, exceptional cases apart, we all come into the world with our wants, our pleasures, our duties, and our ambitions circumscribed for us by the station into which we are born. See, I have put my case strongly ; and I think, by this time at any rate, you must understand me. I am much obliged to you for having listened to me so kindly ; and now treat me as I have treated you. Put your case strongly also ; and however irrational, inhuman, stupid, selfish, dishonest, or brutal you think my views to be, do not scruple to tell me. Recollect, too, that with regard to equality in the cradle, we are both of us taking our stand on exactly the same premises.

FRANKLIN.—A few moments ago, you thought that what you said irritated me. Let me beg you to believe I am not speaking in irritation now. I am obliged to make this preface, for I certainly shall speak strongly. That view of life, then, which you insist I am to accept as your own, seems to me a negation, at once cruel, stupid, and hopeless, of everything in the social order which, in these days, makes the idea of society tolerable, which benevolence wishes, which reason demands, and which the course of events is accomplishing. I will not indulge my feelings farther in any indignant generalities. These are enough, and indignant enough ; I will now explain them in detail. What the Radical believes, and what you, too, say you believe, is that Nature, when she sends children into the world, is no respecter of classes. Sweeping aside, then, the dreams of class superstition, what really differentiates, and what really graduates men, is not their birth, but their life.

ALISON.—Excuse my interrupting you ; but so long as men are born to unequal fortunes, their life will be differentiated and graduated by the accident of their birth ; nor will they any the less be divided into different classes.

FRANKLIN.—If you listen, you will see that that is the very point I was coming to. Of course, there will be different classes so long as civilization lasts. No Radical is such a fool as to

think there will not. As long as knowledge lasts there will be thinkers and men of science; as long as men eat fish there will be fishermen.

ALISON.—And do I not gather from what you just now said that the man of science and the fisherman will be so far different beings, that not only their happiness, but even their health, will depend on social conditions of a widely different character?

FRANKLIN.—Surely that is what I began our conversation with insisting on. If physical labor were as hard to the physical laborers as it would be to those whose labor is mainly mental, we should have to regard civilization itself as criminal. You seem to imagine, however, from the tone in which you urge this fact on me, that there is something in it that is inconsistent with my position. That shows how imperfectly, even yet, you grasp what that position is. We do not say there is to be no difference in classes, any more than we say that there is no difference in capacity; but what we declare to be the truth, and what we desire to see recognized as being the truth, is that class depends on capacity, not capacity on class. We do not think that any fisherman's child can become a prime minister; but we should wish every fisherman's child to be conscious that, did his talents and opportunities fit him for the career of politics, there would be nothing incongruous, nothing unusual, in his aiming at or attaining the very highest offices of state. So, too, with regard to social distinctions (supposing their continued existence), we should wish every fisherman's son to feel that, had he social talents and social opportunities, there is no company, no matter how brilliant, with which he would not have a natural right to mix.

ALISON.—If that is what you mean, your millennium has begun already. Surely in politics, even you must be satisfied with the number of men who are wholly without pedigree, and I might say the same thing, very nearly, of smart London society.

FRANKLIN.—Yes, things are moving in the right direction; but before *we* are satisfied, they have far to move yet. As to smart society, I mentioned that as an illustration of my meaning merely, not as any part of the substance of it; but as an illustration it is exceedingly useful. I heard the other day of a man, of what you would call high family, who had been honored

at the house of a great Liberal peer, by meeting at dinner several of the most brilliant thinkers of the day, and on some one remarking to him how the fine ladies present paid court to them, "It is the distinguished thing now," he said, "not to have had a grandfather."

ALISON.—Such a sneer, on his part, seems to me to have been rather vulgar.

FRANKLIN.—I am not concerned with its vulgarity, and I am not quoting it as a sneer. Let me suppose it to be the literal truth. What I want to tell you is this: It is not a truth with which any Radical would be satisfied. We no more want it to be a distinguished thing not to have had a grandfather than to have had one. We want the matter to be one of total indifference, and the position of a man's parents to be of no more social importance to him than the color of their eyes, or the number and length of their hairs. Here is another small point I may mention. How often, in England, does one hear the families of farmers laughed at for living, not beyond their means, but beyond their station! Again, a certain pomp of life, which would be thought quite natural in a duke, would be thought ludicrous in an opulent butcher who could equally well afford it. Now, as for myself, in my own house I have nothing but maid-servants: the present question, therefore, does not touch me. But though I am no apologist for pompous living in any one, I may say that, in the state of society which Radicals are laboring to realize, it will, among those who can pay for it, be thought quite as becoming or as unbecoming in one man as in another. At present, it is thought to symbolize in the duke's position some underlying reality which in the butcher's has no existence. The Radical desires that this so-called reality should be frankly recognized as having no existence in either case. Again, let me remind you that I mention these special matters, not for their own sake, but for the sake of the view of society they symbolize; and I hope that, if you take them in that light, they will have at last made my meaning clear to you.

ALISON.—The general meaning you have in your own mind is, I think, perfectly clear to me. As to the practical application of your principles I am not quite so clear. Benevolence, you say, wishes their application, and reason demands it. As to why this should be so, I confess I am as dark as ever.

FRANKLIN.—Must I really, then, draw my inference for you? Is that so? Is it not self-evident? It was well said, the other day, in a Radical English newspaper, that the practical watch-words of the Radical party are these: "Promotion by merit," and "The tools to him who best can use them." Apply this, not to politics only, but to every distinction, to every labor of life—and there you have the practical meaning of Radicalism—of freedom, of justice, of progress. All men are born equal,—that we both acknowledge,—not personally, but socially. Let each man, then, be free to be what he can make himself. Let no man say, "Because I am the son of a fisherman, therefore it is presumption in me to aspire to be more than a fisherman." Talent, ambition, aspiration are on all sides of us—among poor and rich alike. Let a career be open to them indifferently, wherever they are. Let us all feel, not that we can all take the highest prizes in life, but that we are, each of us, equally free to take the highest prize that we can merit.

ALISON.—Thank you. That is quite plain enough. Let me now ask you a question or two. All men are equal at birth, whether their parents are rich or poor?

FRANKLIN.—We have both agreed as to that. It is the admission we start from.

ALISON.—How long, then, does this equality last? How soon does the brain and body of the fisherman begin to differentiate itself from the brain and body of the clerk?

FRANKLIN.—Hitherto we have said nothing of education in its technical sense. I am now coming to that. Without such education, most children will very early take a permanent bent according to their early surroundings, and it will be difficult for their ideas or their natural talents to extend themselves beyond the circle of their parents' life and occupations. But education prevents this premature fixing of the character. It opens a boy's eyes, so that, before his lot is chosen, he is aware that, for the resolute, there are many lots to choose from; he is able to ask himself for which he is best fitted: thus his destiny is—partly, at least—placed in his own hands; and if his talents fail to meet with what he thinks their fitting reward, he will not have to revile society with having failed to do justice to him, but to settle with his own conscience, because he has failed to do justice to himself. Thus wealth and all distinction being recog-

nized as the reward of merit, wealth and distinction will excite no envy—or, at all events, but little, and only in exceptional natures.

ALISON.—Is the rich man's child reaping the reward of merit when it gradually learns that it has ready prepared for it all those means of pleasure, of learning, and of beneficence, which the poor man's child, should he prove ambitious, must spend half his life in a doubtful struggle to obtain?

FRANKLIN.—Men can well put up with an inferiority in circumstances so long as no inferiority is thought to inhere in themselves. The cardinal social truth, both in the head and in the heart of the Radical is that each man is what he makes himself; and that any man may make himself anything. If riches have helped some to make themselves exceptionally wise or useful, let the rest look up to them as wise and useful brothers. This kind of respect is very different from cringing to a man, not because he has used opportunities, but merely because he has had them. You said just now that I had already made my position plain enough. That is not the case. The most important practical issue of the Radical tone and temper I have hardly done more than mention. Once let these views of society I have been speaking of penetrate all classes, rich and poor alike,—driving away the shadows and the superstitions of Feudalism,—and society will recognize far more clearly than now the extent of the state's duty to the poor in the matter of education. One result, I need hardly say, will be that, for the poor, education will be free; but more than that, and even more important, it will gradually change its character. It will aim not only at quickening the intelligence, but at enlarging the imagination, at giving every young eye a commanding view of life, and impressing every young mind with a sense of social self-respect. In this way we Radicals are hopeful, that, putting aside the question of personal luxuries, the distribution of which it can never be possible to equalize, the children of each generation, be their parents rich or poor, will start in life with their opportunities equalized to a degree which at present is to you almost unimaginable. Now, I think my whole case is before you, and I am ready now to listen to yours, which, so far as I understand it, is a direct negation of mine.

ALISON.—Not quite so. You forget that I am conceding to you that all classes are born equal. But I concede even more

than that. I concede something you have not directly stated, but which of course you imply, that those social and those political arrangements are best which most diffuse happiness, not among the few only, but among all.

FRANKLIN.—Well——

ALISON.—I concede even more than that. I concede—at least, for argument's sake—that education might be so regulated as to produce among the young of each generation as much equality as might exist later in life at the university, between the son of a small tradesman and the son of a millionaire merchant.

FRANKLIN.—Supposing such a pair to be friends, and the one not to despise the other, the equality between them would represent all that I hope or ask for.

ALISON.—I concede, then, that education might produce it—not that I think it would, but for the sake of argument. Now, I boldly, with my eyes and my heart open, declare that, supposing such a consummation possible, I would, were I statesman, do everything in my power to avert it, and I should regard it, did it ever take place, as the greatest of social calamities and the beginning of social dissolution.

FRANKLIN.—Are you serious?

ALISON.—Wait a moment longer, you have not heard me out yet. You would wish, you say, to enlarge the imaginations of the poor, to give their eyes a commanding view of life, and to teach each poor child to think that no lot in life need be beyond its natural ambition. I, for my part, would offer to their eyes not as many careers as possible, but as few. I would have them think that careers and ambitions, both, were fixed for them by their birth within certain well defined limits, and that what lay beyond these limits for them was the moon and stars. You tell me you would enlarge their imaginations. My dear Franklin, I would restrain and chasten them.

FRANKLIN.—What then! And is the son of the laborer to have no hope? Would you say to those who must always be the majority of mankind, "Aspiration is not for you. Among you genius will receive the reward of a crime, and can only beat itself to death against 'its birth's invidious bar'?"

ALISON.—Let us put genius out of the question. Genius will always rise, and will rise the brighter from having made its way through difficulties. We are talking now of the general

run of men; and if by "aspiration" you mean the desire to rise out of one's station, I should say as a general truth, not to laborers only, but to every other class, "Aspiration is not for you." But since it is the laboring class you allude to specially, let us speak of that; or, better still, of that section of it which has really formed our text,—these Jersey fishermen, whose red sails at this moment are already dotting the gray surface of the sea. You think—I can see it by your face—you think what I have just been saying is monstrous. I am going to meet you with an *argumentum ad hominem*. Compare these fishermen with yourself. What a contrast in every way. You are full of wishes for the welfare of the world at large, and able yourself to appreciate the high and refined happiness that comes from the exercise of your own intellect, the approbation of your own conscience, and the pure affection of your family; you desire that such blessings should be diffused. But these fishermen—the objects of your wishes—what do they know or care for all the fine things you wish them? If you offered them money, no doubt they would clutch at it with a stupid avarice, to which before they were strangers; but what leisure can be theirs to know anything of the pleasures either of thought, of right doing, or of affection? If you could abolish fishermen altogether, well and good; but since you cannot, it is well that you should recognize the fact that, between you and them there is no kind of equality, and that your Radical principles can never, except for harm, alter their condition any more than a dog's.

FRANKLIN.—Suppose you made a speech like that at a public meeting. Would not you be howled down by the indignation of all your hearers? I do not howl you down; but my blood boils none the less. Still, I will answer you calmly. In physical constitution, the fisherman and I differ; our thoughts have been trained to employ themselves on different subjects; among them I grant there may be worse men, more stupid men, and unhappier men than I. But if so, that is not because they are fishermen. God knows—

ALISON.—I thought you did not believe in God.

FRANKLIN.—Whether I do or no, let the name be a sign of the solemnity and the conviction I am speaking with. God knows, I say, that in those boats yonder, in those cottages below us, by the simple hearth, or among the foam, the ropes, and the fish-baskets, hearts may beat as tender as, perhaps more tender than

mine; lives may be led as happy as mine, and in all human essentials nobler than what I can attain to.

ALISON.—What! does your wealth, your culture, and the power which your wealth gives you—does not that raise you high above these men we are speaking of?

FRANKLIN.—This makes my life different; it enlarges my sphere of action; but it need not make me a truer man, nor, though I am happy, a happier one.

ALISON.—Relax your look of severity. Let your blood cease to boil. In every word you say, I agree with you; and when I spoke just now those words that shocked you, I was not stating any views of my own; I was merely stating what is the logical deduction from yours.

FRANKLIN.—From mine!

ALISON.—Yes, from yours. It is you, not I,—it is the Radicals, not the aristocrats,—who insult the people, and who treat the workman's life as a degradation. Is it not the gist of your gospel that the prizes of life should be open to all—meaning by the prizes, station, wealth, distinction, political power, and so on? and do you not ridicule those who deny your gospel? and do not you call it cruel to say that the man who is born a laborer, must, as a rule, remain a laborer always? Why, if the laborer, in all essentials, can be as happy as the rich man, what cruelty is there in wishing that he should, in most cases, remain as he is?

FRANKLIN.—Have I not said there must always be distinctions of classes? But talent demands for its exercise a wider though not a happier sphere, than that which belongs to the laborer. Let every laborer with talents be free to rise, so as to use them. You tell me these cases are rare, and that we may put them aside as exceptions. In doing that, you are begging the whole question. We can set nothing aside as, properly speaking, exceptional, save genius of the very highest and very rarest order. A percentage of talent in every generation, is the rule, not an exception. Were it not so, civilization could not sustain itself; and you yourself are admitting, quite as fully as I, that among the children of laborers the percentage of natural talent is as large as among the children of the wealthy; that as many are born with capacities for law, art, politics, military command, mechanical invention—what you will. Now, at present, we Radicals think that all this mass of talent lies undeveloped, practically non-existent, lost to the world, through the mal-ad-

justment of society; and it is these sleeping forces that our reforms would set free. Half of the talent of the working classes is scarcely ever conscious of itself; the other half is conscious only to resent the injustice that oppresses it.

ALISON.—Let it be, as you say, that among the millions of the people there is as large a percentage of talent as there is among the thousands or the hundreds of the wealthy; that for every competitor for distinction in commerce, in science, in law, or in politics, that is supplied by the villa or the castle, a thousand others would be supplied by the cottage or the workman's quarter. What then? You will have more men wanting to be lawyers; but you will not make more lawyers wanted. You will have more men wanting office, but not a society wanting more officials. You will be merely multiplying the number of candidates, without multiplying the number of posts, and without, on your own showing, making the quality of the candidates higher. What you do will be simply this: you will multiply failures, you will not multiply successes.

FRANKLIN.—I call it a failure, when a man who is fit for a higher occupation has to spend his life in a lower one; and the world in that sense is peopled with failures now.

ALISON.—Again you are doing it—doing what I just now taxed you with. You are insulting the people—the masses, whose champion you declare yourself to be. Listen to me; I will go even farther than you. I will say that, of the laboring classes, not merely that there is a large percentage born fit for occupations other than manual labor; I will say that, with a few exceptions, this might be said of all of them. There are few men who, if bred to it, might not do more than dig or, to keep to the instance of our fishermen, might not do more than fish. But so long as the earth is earth, and so long as man is man, diggers and fishers the mass of mankind must be; and your fine radical gospel as to rising in life is an exhortation to human society to escape from its own shadow.

FRANKLIN.—You admit that it is a shadow, then?

ALISON.—I admit nothing of the kind. I had no intention that you should take my simile literally. If you like to deplore the lot of the manual laborer as in itself an evil, and one not worthy of a man, you are of course free to do so; but to deplore as an evil conditions which you never can alter is to make these conditions the very curse you say they are. Let us suppose that

labor is an evil. Is not death an evil also? And yet we all can be cheerful—even knaves and cowards—under its shadow; and all but knaves and cowards can be resigned and calm in its presence. Suppose, however, some quack could persuade us that death was due to preventable causes, and could be altogether eluded by some form of revolution, then, indeed, to this generation of dupes, death for the first time would begin to make life a hell. It is the same thing with labor; except that death can never quite lose its sting, whereas labor is a nettle which, if grasped, may turn into a flower. My dear Franklin, I would ask you to lay this to heart—that, in an honest and useful life, its necessary conditions become intolerable only when we are taught to indulge in a false hope that we can escape from them. To go back once more to our exceptions, I should no doubt think it deplorable if a man were to die a carpenter who might have been a Shakespeare or a Raphael; but I should see nothing deplorable in a million men dying carpenters, who, born in a different sphere, would have been first-rate clerks or attorneys.

FRANKLIN.—Supposing you had the technical skill, should you like now to become a carpenter?

ALISON.—Have I had a carpenter's education? According to you, it is education makes us what we are; and the life that would be happy for a carpenter would be miserable to me. I need not answer your question, you have emphatically answered it yourself.

FRANKLIN.—The worth of opinions in these days can best be tested by considering what reception they would meet with, if freely addressed to the democracy. Apply that test for a moment to these views of yours. Would the people listen to you in this nineteenth century, if you were to get up on a platform merely to preach content to them, and to tell them they were doomed for life to the lot they have happened to be born to? Would you tell them that? Or, if not that, what would you tell them?

ALISON.—I would tell them this. I would tell them that the first and the best ambition for each of us, is not to leave our station, but to make the best of it. Bound your ambitions by the limits of your own stations—then every one of you may succeed. Once learn to put your ambitions higher, then all of you—except some very few, will be failures.

FRANKLIN.—Do you think, in these days of education, such a limiting of the ambitions is possible?

ALISON.—That surely depends on what the education is. If education teaches that there are no limits imposed on the individual by the nature of the social structure, then——

FRANKLIN.—Then, what?

ALISON.—Then will be the reign of Radicalism, and that will mean a war against nature.

FRANKLIN.—You have taxed me, in my social scheme, of thinking of what would be best, irrespective of what is possible. Are not you doing the same thing? Is it possible, I ask you, in these days of knowledge (for I will drop the word education, since you think it ambiguous),—is it possible that the intelligent poor shall be blind to the advantage and pleasure, not of riches only, but of power and distinction also, and not do all in their power to deserve and win these for themselves?

ALISON.—This insane struggle of the millions for what can only belong to the hundreds, if once excited, it is no doubt hopeless to check. Hopeless?—I would I might retract the word. There may be hope yet. One thing only can check it.

FRANKLIN.—And what is that?

ALISON.—The strength of the national character; the loyal subordination of one rank to another; and the recognition that, though the highest prize of life—the sense of having done our duty—is open to all, what you call “the prizes of life” can be profitably competed for but by few, and can be possessed but by very few.

FRANKLIN.—And by these arguments you will persuade the English people to bow down to the House of Lords, will you? And you will call that a sign of the soundness of the national character? I wonder what you would say were you in America!

ALISON.—Here you are once more at the unfortunate House of Lords. Franklin, that subordination of class to class I speak of can take many forms; and the forms will vary with each nation's history. I have reminded you already that America is growing; but if all I hear be true, these very virtues are forming themselves in America which you and yours are trying to destroy in England. But why should we continue talking? I can see you are not convinced. Nothing I have said has made the least impression on you.

FRANKLIN.—Nothing. I may as well be frank with you; for

I believe that I represent as well as most people the democratic intellect of the day; and if that be the case, I may well say, on behalf of all us Radicals, "Time is on our side." Be our cause bad or good, it is the advancing cause.

ALISON.—"Time is on our side." Who was it said that?

FRANKLIN.—A great Radical statesman. He took it for his motto.

ALISON.—It is also the motto of Death. Come—after all our quarrelings, we may part agreeing about one thing: that may be my motto also, for Death, who will so soon have dealings with me, will take me away from the evil and the wretchedness that is to come.

W. H. MALLOCK.

SUGGESTIONS IN REGARD TO THE PUBLIC SERVICE.

TWO PRIME objects are sought to be accomplished by the "Act to regulate and improve the Civil Service of the United States," under which the Civil Service Commission has been organized.

1. To secure open competitive examinations for testing the fitness of applicants for the public service.

2. To take the clerical force of the Civil Service out of the influence of the politics of the country.

In regard to the desirability and importance of a careful examination as to the qualifications and fitness of applicants previous to their appointment, there can hardly be two opinions; and it will be readily conceded that the examinations instituted by the Civil Service Commission will tend to improve the service.

Two rules have been adopted by the Commission, and approved by the President, namely:

- I. "No person in said service shall use his official authority or influence either to coerce the political action of any person or body or to interfere with any election.

- II. "No person in the public service shall for that reason be under any obligation to contribute to any political fund, or to render any political service, and he will not be removed or otherwise prejudiced for refusing to do so."

These rules have unquestionably received the hearty approval of the public. The passage of a law requiring the adoption of such rules proves that a strong opinion prevailed that an abuse existed, which needed this law and these rules for its correction. Whether the evils sought to be remedied really did exist to the extent supposed, or whether they were exaggerated in the public mind, are questions outside the scope of this article. The law and the rules are so eminently just and proper in themselves

that they deserve to be perpetuated; and so far as they prevent undue political influence, or pressure by superior officers upon the clerical force of the Government, the service will be to that extent elevated.

Little has been said of late in commendation of our Civil Service. It was remarkable that, during the recent debate in the Senate upon the Civil Service bill, there was no definite statement made as to the true condition of the service. It seemed to be an accepted conclusion that a reform was needed, and so the present law was passed. Would it not be well that some note be taken of the actual condition of the service, so that there may be no misunderstanding, a few years hence, of what has been accomplished under the new law?

The Treasury Department will be taken as an illustration.

First. As to removals and appointments. Many prominent and otherwise well informed citizens labor under the impression that the clerical appointments in this department are the perquisites of senators and members of Congress, and that there has been a procession of new and inexperienced persons (but who are active politicians) marched in to take the places of trained clerks who had no political backing, and who were therefore marched out. What are the facts? The clerical force, including messengers and laborers, of this department consists of 2250 persons. Of these, 135 have served twenty years and upward; 425, fifteen years; 414, ten; 214, eight; 299, five; 294, three; 469, less than three years. There have been 468 vacancies in this force during the past three years—an average of about three per week. Of these, 312 occurred by death or resignation, and 156 by removal for cause. The average length of service of the entire clerical force of the department is nearly ten years. There are now in the department one employé appointed in 1835, one in 1836, one in 1847, one in 1848, three in 1849, one in 1851, three in 1853, two in 1854, two in 1855, one in 1856, four in 1857, one in 1858, three in 1859, five in 1860. The aggregate length of service of these twenty-nine office-holders, appointed prior to 1861, amounts to 850 years. In the Internal Revenue Bureau, which was organized in 1862, there are now six employés who were appointed in 1862, eight in 1863, ten in 1864, eleven in 1865, seven in 1866, eleven in 1867, three in 1868, twenty-nine in 1869, eleven in 1870,—a total of ninety-six employés, or nearly half of the entire force, whose

terms of service range from thirteen to twenty-one years. The average length of service of the present employés of the Bureau is over ten years. It will thus be seen that, even under the conditions as they existed prior to the passage of the Civil Service Act, nothing short of life tenure would materially extend the duration in office of the average Treasury employé.

It is true that there was a time, not long since, when there was an annual and demoralizing scramble for certain temporary appointments in the Treasury Department, which were made under a very defective law then existing. To correct this evil, three valuable measures of reform were adopted. These reforms have scarcely attracted public attention, and yet they have worked a revolution in the manner of making appointments, and therefore deserve special mention.

Formerly there was an appropriation of \$100,000 per annum for the employment of temporary clerks. This fund became available annually, on the first day of July, and caused a great rush for places upon the temporary rolls. The demands were so urgent, and the pressure brought to bear was so great, that the number employed would usually exhaust the appropriation before the expiration of the fiscal year, and many employés would consequently be dismissed for want of funds wherewith to pay them. This became a source of so much annoyance and embarrassment that, upon Secretary Sherman's recommendation, the appropriation was discontinued, and the plan was adopted of making details from the various bureaus to perform such extra work as might be required in the Secretary's office.

For many years the practice prevailed of employing clerks upon what was known as the "Lapse Roll." These employés were paid from salaries which had lapsed by reason of vacancies or leaves of absence without pay. The appointments were temporary, but there was a constant pressure to secure them, and to remain in after having been once appointed. Then, again, there were a large number of persons employed, and necessarily so, under appropriations which fixed neither the number nor the salaries of the employés, and this was another field of struggle and contention. Secretary Folger wisely recommended legislation requiring that lapsed salaries be covered into the Treasury, and providing specific appropriations in the other cases, fixing the number of persons to be employed, and the amount of salary to be paid to each. The adoption of these measures worked

a salutary change in the number of applications for appointment, and left to the Secretary the duty of filling vacancies as they occurred from time to time, by death, resignation, or removal for cause.

Second. As to the character of the force employed in the Treasury Department. Let it be judged by the old homely standards of integrity, capacity, and fidelity; commence with the great positions, and go down through the entire clerical force, and it will be found that it needs no reform. As a great business establishment it can scarcely be improved. In all its various branches are to be found men and women of high character, of splendid intellectual gifts and rare cultivation, well fitted for their respective positions. The heads of bureaus and divisions are earnestly devoted to the interests of the Government, and are loyally supported by their subordinates, with scarcely an exception. The Treasury Department has not been demoralized by political pressure, political assessments, and political removals and appointments. Nor are the seven great departments of the Government in Washington suffering from dry-rot on the one hand, or from excessive change on the other. There is a steady current of fresh blood flowing in, so that the whole body is kept in a healthy condition. No complaint is heard that the business of the Government and people is indifferently performed, or that the service is incapable, inefficient, or corrupt. On the contrary, the testimony of persons who have become familiar with the workings of the departments, from actual observation, will be that the service is honest, capable, and efficient. It may be safely stated that, if the departments were subjected to a rigid examination with a view of removing all those who, by reason of age or other disqualification or mental incapacity, should be considered inefficient, less than five per cent. of the whole number would be found thus wanting; and of these a large number would be disqualified only on account of advancing age and infirmities.

The Civil Service Act, and the rules made thereunder, do not in terms provide for a life tenure of the clerical force of the Government; but many of the most intelligent persons connected with the Civil Service reform movement favor a tenure during good behavior, which is practically the equivalent of a life tenure. The adoption of such a proposition I sincerely believe would be inconsistent with the principles of our republican form

of government, and contrary to the sentiment of the people. It would create a privileged class, removed from the influence of popular thought and feeling, which in this country is a constantly operating force favorable to honest and efficient administration. It would repress the laudable ambition of other citizens to serve the Government in official capacities, and would manifestly tend to weaken that personal interest in the affairs of government which it is the policy of our country to foster in the minds of its citizens. The highest type of civil administration, in my judgment, can much better be attained by giving increased certainty to the tenure by which offices are held, while at the same time leaving them within easy control of public sentiment, so that the whole official body can be kept abreast of the progressive opinions of the people. It seems to me it would be a great improvement in the existing Civil Service law to add to the probationary system the principle of appointment for a fixed term, say of four years, the appointee at the end of that time to be eligible for re-appointment and, at all times during the period for which he is appointed, to be subject to removal only for such causes as may be prescribed by law.

A serious question which always confronts heads of departments and bureaus, is the disposition to be made of the persons who have served the Government faithfully for many years, but who from the natural infirmities accompanying old age are rendered incapable of the proper performance of their duties. As a rule, these persons have been unable from their meager salaries to lay up a sufficient sum for their support in their declining years, and they are no longer competent to undertake the duties of active private life. The service is now suffering to some extent from the presence of this blameless but inefficient element. It is obvious that the evil would, in time, be greatly aggravated by the unconditional acceptance of the doctrine of tenure during good behavior, for it is not *misbehavior* for a man to grow old during the faithful performance of his duties in office. The question arises whether, under such a system, there would not soon grow up a cry for a civil pension list for retired officers. The sentiment of the country is now unmistakably adverse to the adoption of such a system, and it is equally clear that it would not tend to the improvement or elevation of the public service. The exigencies of the service, however, demand that some suitable provision be made for the retirement

of these aged persons in a manner which shall give recognition to the value of their past services, and at the same time enable them to retain their respect for the Government and their own self-respect. The suggestion is therefore made whether it would not be wise to establish for such long-serving and faithful officers a system of retiring pay—not a continuous pension, but a commutation to be paid in lump, on retirement, graded according to length of service and rate of salary.

I believe it will be found to be a serious objection to the system of appointments and promotions established under the new law, that heads of bureaus, who are specially interested in the successful workings of their offices, and heads of departments who are intrusted by the constitution and the laws with the appointing power, are restricted in recommending and making appointments and promotions to the four names presented by the Commission. Though they may have in view a person especially adapted for the duties of the position to be filled, they cannot appoint or promote him to the place unless he happens to be one of the persons selected by the Commission. I am satisfied that, if the present efficiency of the service is to be maintained, it will be found necessary to relax this inflexible rule.

There are other subjects, connected with the administration of the executive branch of the Government, which deserve attention. I think that, as far as it can be done consistently with the interests of the service, the number of persons to be employed and the salaries to be paid them should be fixed by law. At present, in the customs and internal revenue districts, the number of persons to be employed, other than collectors and other officers appointed by the President, and the compensation to be paid them are largely left to the discretion of the Secretary of the Treasury. It would seem that these employés might be graded as in the departments at Washington, and their salaries fixed by law. The adoption of such a measure would relieve the collectors and the Secretary of the Treasury from the unpleasant and onerous duty of fixing the salaries of a very large number of their subordinates, and from the pressure now constantly brought to bear upon them for an increase of the same.

The most important field, however, in my judgment, for legislative and administrative reform is in connection with the administration of the offices of United States district attorneys, marshals, and commissioners. These officers are paid by fees. While the

maximum fees of district attorneys and marshals are fixed by law and the orders of the Attorney General, the amount actually received by them is contingent upon the institution and prosecution of cases in court. The District Attorney is made the judge of the propriety of commencing criminal proceedings against a citizen, when out of those proceedings fees will accrue both to the District Attorney and the Marshal, whether the person accused be guilty or innocent. These officers may prefer complaints against citizens for trivial or unintentional violations of revenue laws, may cause their arrest and examination before a United States commissioner; and district attorney, marshal, deputy marshals, guards, witnesses, and United States commissioner will all receive their fees or expenses out of the treasury of the United States, even though the persons arrested should be promptly declared innocent and discharged. It is not in human nature that such a system can continue without abuses growing up. Even in well ordered communities it is productive of a most wasteful and unnecessary expenditure of the public money; in new and remote settlements the practice has resulted in grave outrages on the rights of citizens. There would seem to be no sufficient reason why United States district attorneys and marshals and deputy marshals should not be paid fixed salaries as are other officers of the Government. The enactment of a law to this effect, and authorizing the Attorney General to regulate the traveling expenses of deputy marshals within certain prescribed limits, would secure a better and more economical administration of justice, would bring the expenditures of these officers within the control of the Department of Justice, and would remove the temptation which now exists to multiply proceedings and institute unjust or frivolous prosecutions in order to realize the maximum of fees.

GREEN B. RAUM.

DR. HAMMOND'S ESTIMATE OF WOMAN.

MRS. BLAKE.

AN attentive perusal of the somewhat rambling essay on "Woman in Politics," prepared by Dr. Wm. A. Hammond, discloses a looseness of argument and incorrectness of statement surprising in one who so stoutly contends for scientific accuracy in others. Thus, after admitting and, to a certain extent, approving the progress of the movement for woman's advancement, this learned opponent of its further success would arrest "the revolution," because she has already secured sundry advantages which, any well informed person should be aware, are still far beyond her reach. He says: "Her right to work in any field of labor she may select is granted; her person and property are as well protected by law as those of man; she has all the rights and privileges necessary for her material and mental prosperity."

A brief analysis of this remarkable series of assumptions will show its incorrectness. The right of woman to work in many fields of labor is denied or restricted. She cannot hold any of the higher positions in the civil service of the country. She cannot fill any of the legislative or executive offices of the Government. She cannot occupy a seat on the judges' bench, and is not even admitted to the bar in New York and many other States, while in innumerable professions and avocations her sex is made a reason for refusing to her equal advantages. Her person and property are not as well protected as man's. Women are in all cities liable to arrest for walking the streets after dark, while the peculiar protection to which their sex should entitle them is everywhere so inadequate that the columns of our journals are daily darkened with shocking stories of outrage on women. As to property, Dr. Hammond must know that, though in several of the new States and a few of the

old ones, women have been secured in property rights, still, in nearly all the Middle and Southern States, and even in some of the New England States, married women can neither inherit nor otherwise acquire property, and are not protected even in their earnings, while the right which, above all others, should belong to the mother—the right to her own children—is denied even in New York. And finally, it cannot be declared that woman “has all the privileges necessary for her material and mental prosperity,” while her wages are everywhere from one-half to one-third less than those paid to men for the same work, and admission to nearly all the higher universities is denied to her.

A still more glaring instance of inaccuracy and want of information on the part of the distinguished physician is displayed in his extraordinary assertion that life insurance companies decline to issue policies to women. There is apparently no shadow of foundation for this statement. Very soon after its appearance, its truth was investigated by some of the newspapers, and it was easily ascertained that insurance companies do issue policies to women, only charging them a trifling additional annual premium if they are under forty-five years of age.

In the opinion of Dr. Hammond, exactness of statement is peculiarly a masculine characteristic, while one of the strongest proofs of woman’s inferiority and consequent unfitness for any share in politics is, that “she does not, while having an abhorrence of falsehood, understand the necessity for being exact in the ordinary affairs of every-day life.”

Apparently, all the men the good physician has ever met were models of truthfulness and scrupulously exact in their statements. If exactness in the ordinary affairs of life is to be a requisite for admission to the right of suffrage, how many voters will there be at the next general election? Will Wall street be represented? How many merchants will dare to come? Will any political organization send a delegation? Hardly, if there has been the usual estimate of majorities and predictions of party success. And even the worthy Doctor himself will certainly not attempt to show himself at the polls after that unfortunate inexactness in regard to life insurance. Indeed, were men judged by the standard to which he holds women, it would be hard to find the ten righteous souls that should save the city.

But the main stress and force of the Doctor’s argument that women ought not to be admitted to political privileges is to be

found in his elaborate comparison of the differences in weight, form, and convolutions between the male and female brain, and the deduction that because of these differences women must not be allowed to vote. No doubt the eminent anatomist is as exact in the facts and figures here given, as the most rigid truthfulness would demand; we would not venture to question the statements of so distinguished a specialist in a department so peculiarly his own, but merely ask if, admitting his premises, his conclusions are therefore correct.

His argument rests upon the statement that the average male brain weighs forty-nine ounces, while the average female brain weighs only forty-four ounces, although he admits that, "relatively to the weight of the body in the two sexes, there is no essential difference in the weight of brain"; and that the female brain differs from the male in structure, the latter having a superior development of the frontal lobes, more intricate convolutions, deeper sulci, and more numerous secondary fissures,—all of these things being assumed to indicate higher mental development, though of course this is mere inference. And, when the assertion is added that "woman's brain is not suited to the work which is required of man," one is tempted to ask how, then, it is that women employed as journalists, teachers, telegraphers, stenographers, type-setters, and in a vast number of other occupations, acquit themselves as well or better than their male competitors?

The Doctor fails to note one point which seems to have some bearing on the question of functional activity, and this is, that, according to Broca, when a man has less than thirty-nine ounces of brain he is an idiot, while a woman is competent to attend to the ordinary duties of life, and may be a useful citizen unless she has less than thirty-two ounces of brain. Surely, this significant fact would seem to indicate that there is in the larger brain of man a want of compactness, and that, relatively, his brain is less capable of control than woman's. Possibly this may account for the frequent masculine tendency toward looseness of conduct and irregularity of morals, and explain why so large a number of our present voters seem to be but little removed from idiocy.

However, admitting the truth of all the Doctor's assertions, the whole force of his deductions from the difference of size and form of brain between woman and man is destroyed by the ad-

mission which he makes, that "it is quite true that the brains of some women are larger than those of some men, just as some women are vastly superior, mentally, to some men." If this be so, then the whole argument that women ought not to vote, because they have smaller brains than men, ceases to be of the slightest value, since, if political privileges are to be regulated by weight of brain, then of course women should have equal privileges with men whose brain power only equals theirs, and superior privileges to those of men whose brains are inferior to theirs in capacity.

But feeling, no doubt, that mere deficiency of volume of brain is not sufficient to stamp women as light-weights mentally, he endeavors to prove their unfitness for political life by a variety of general deductions. He says: "The best wife, the best mother, the best sister, would inevitably make the worst legislator, the worst judge, the worst commander of a man-of-war,"—a hasty assumption which it is easy to make, considering that, from the universal masculine usurpation of all the best positions, we have very few data to prove what women would be in commanding positions. We know, however, that Deborah, the great lawgiver of Israel, and Maria Theresa, the valiant Empress of Austria, were both good wives and excellent administrators; while, as a rule, men who have been conspicuous for their ability as legislators, judges, and commanders, have been notoriously bad husbands and fathers, from Socrates to Lord Nelson.

Again, the Doctor declares that in women the emotional nature predominates over the intellectual,—a hasty generalization to which any one's circle of acquaintance will offer exceptions,—and asserts that to this is due the fact that "very few women are capable of an intense degree of abstract thought." As this is equally true of his own sex (and very few men "are capable of an intense degree of abstract thought"), no important deduction is possible from so universal a failing.

Further, he says that woman is inferior because "she will sacrifice her own happiness, her life, and all considerations of duty to others and the public at large, for some man whom she loves." But as the records of human life prove that man, under the sway of passion, will sacrifice everything to the woman he loves, the statement amounts to nothing more than a truism with regard to both sexes; and similarly when he argues that women, if acting as judges and jurors, would be influenced by sympathy with

a handsome felon, he only asserts that they would be as weak as men occupying similar positions, who are notoriously lenient to beautiful female culprits.

"The female mind," he contends, "experiences overwhelming difficulties in the study of mathematics,"—a very singular statement in view of the fact that within the last few years mathematical honors at the universities of Edinburgh, Cambridge, and London have been won by women; and that the average mathematical attainments of the girls in the normal colleges is above that of the boys in our high schools.

Again, the brilliant instance of woman's capacity for the most difficult mathematical calculations, displayed by Mrs. Roeb-ling in the important part she played in the building of the Dlyn Bridge, disposes of the Doctor's sneer that the female is incapable of grappling with the problems involved in construction of suspension bridges, and makes the silly comparison between a mathematical woman and a tipsy hare a mere gratuitous impertinence.

But, like a good general, reserving what he doubtless considers the most powerful battalions of argument for the close of the battle, the great specialist attempts finally to annihilate all woman's aspirations for personal liberty by dwelling at considerable length on the "peculiar neurotic condition called the hysterical, which is grafted on the organization of woman." He declares that, while this "is the cause of all the most charming features in her character," it also makes her peculiarly susceptible to extraordinary excitement, and that therefore she should not be intrusted with political power.

It is evident that the distinguished alienist, in his estimate of woman's powers and capacities, is largely influenced by the studies of dementia and hysteria, to which he has devoted a large portion of his life. His acquaintance with normal and healthy women must be limited, or he would have considered how many wives and mothers daily meet circumstances which require discretion with admirable capacity, and how that in scenes of public danger the presence of mind displayed by women has often put to shame the cowardice exhibited by men.

However, the argument against woman's admission to politics, drawn from her emotional nature, if it proves anything at all proves entirely too much. If liability to excitement unfits her for positions in which "force of intellect, power of disinterested

judgment, and large views of public policy are concerned," what shall be said of her brother man's capacity? Assuredly the members of that sex are also "at any moment, and often from slight causes, liable to burst out into unexpected and uncontrollable paroxysms, in which all the mental and physical faculties are perverted from their normal course and thrown into a condition of most astounding turbulence," as will be admitted by any spectator of the recent prize fight in Madison Square Garden, where learned professors, grave statesmen, and distinguished jurists shouted and swayed in wild excitement over the blows exchanged by two brutal giants. Many a quiet wife could bear similar testimony to masculine proneness to undue violence from causes no more momentous than the annual house-cleaning.

Certainly, any one who has ever been present at a Presidential nominating convention and seen men, under the excitement of the moment, howling, screaming, weeping, tearing off their clothing to throw it in the air, and utterly exhausting themselves by the violence of their emotions, might well declare that in every man "there is a potentiality for irregular, illogical, incongruous, and altogether inharmonious conduct under circumstances which require the utmost degree of presence of mind and discretion." In view of scenes like these, the calm observer, if non-professional, might well suppose that, despite the physiological differences, men were also subject to "the peculiar neurotic condition called the hysterical."

In fact, after comparing the conduct and attributes of the two sexes, "extenuating naught, neither setting down aught in malice," to be consistent, the Doctor must either declare men unfit for politics, or admit that, since he himself has said that women excel in conscientiousness, truthfulness, and intuition, these qualities should be represented in government as an offset to the folly and unreason which so often sway our present voters.

Briefly stated, the whole essay amounts to little more than the assertion that women must not vote because they are women—a begging of the question hardly worthy of so severe a critic. In conclusion, we cannot do better than to quote the words of a scientific writer as distinguished as Dr. Hammond. Prof. Huxley, in discussing the same question, while candidly admitting the disabilities of sex, says :

"We fear that, so long as this potential motherhood is her lot, woman will be found to be fearfully weighted in the battle of life. The duty of man is to see that not a grain is piled upon that load beyond what nature imposes; that injustice is not added to inequality."

LILLIE DEVEREUX BLAKE.

MISS MORAIS.

IF Macaulay's New Zealander, sitting upon a broken pier of the Brooklyn bridge in some future age, should take up a copy of *THE NORTH AMERICAN REVIEW* for August, 1883, he might reasonably infer that the wearing of long hair, or short hair, or hair parted in the middle or on the side, bore some occult though direct relation to the profoundest sociological problems of our times. It is indeed true that any departure from the reigning fashion of wearing the hair has for many ages denoted the social barbarian; and the length or the cut of the coat of a reformer is to many minds the gauge of the propriety of his reform.

But Dr. Hammond, in his appeal to popular prejudice, may be contradicted at the outset. He states that the Woman Suffrage movement was at first conducted by abnormally constituted men and women, who respectively displayed longings for the clothing and characteristics of the opposite sex. He declares that these beings were universally regarded as a "set of impracticable fanatics," who, being "unhappy in their domestic relations," tried "to make their fellow-creatures as miserable as they were themselves." He asserts that the first proceedings of the "suffragists" displayed the effects of that peculiar neurotic condition called the hysterical, which, according to the Doctor, is a normal state of the female organism. In reply to criticisms of this order, H. B. Blackwell, of the "*Woman's Journal*," whose authority on the subject is beyond question, names the prominent men and women who took part in the movement or expressed sympathy with it in its earliest days. Some of the "effeminate" men were Ralph Waldo Emerson, William Lloyd Garrison, Bronson Alcott, John G. Whittier, George W. Curtis, T. W. Higginson, and Wendell Phillips. Some of the "abnormally constituted" women were Lucretia Mott, Elizabeth Cady Stanton, Lucy Stone,

Antoinette Brown. Many of these men and women were happy husbands and wives; most of them have exercised beneficial influences on American life and thought; and their fanaticism was effective enough to aid in erasing forever the sarcasm that made our national hymn celebrate "The land of the free and the home of the *slave*."

Moreover, the records of the first suffrage meetings have been carefully preserved, and, bearing in mind the contumely heaped upon the characters and motives of the participants, their papers are singularly calm and dignified. Indeed, the pioneers of the agitation appreciated full well that only by irreproachable demeanor and persistent appeals to the popular sense of justice could even a primary hearing be obtained.

The movement for woman suffrage was not an hysterical outburst of abolition notions, but the expression of a long germinating idea, which the war times brought prematurely into prominence. The French Revolution had not fired the hearts of men without sending a spark into the breasts of the mothers of men. Mary Wollstonecraft, the first vindicator of the rights of woman, dedicated to Talleyrand the work which strove to impress upon women the beauty of physical health and moral purity, and which enjoined upon them to spurn the courtesy that called them admirable because of their weakness. Since the time of Mary Shelley's beautiful mother, many gifted women—among whom were the gentle sister of Elia, and our own sweet singers Alice and Phœbe Cary—have spoken as boldly as they dared on behalf of their sex; but not until the days of the antislavery agitation was any organization attempted to promote their ideas. At that time women, whose influence by pen and by tongue had formed a large if not a preponderant factor in the triumph of abolition principles, were appointed as delegates to abolition meetings, but were refused the right to vote in a cause for which they had worked so earnestly and so effectively. "You may fill our ranks by your songs and your books; you may sacrifice health, time, means, for the cause in which we are engaged; but you cannot comprehend the issue involved, and even if you did, the act of voting would unsex you." This was the logic of the anti-suffragists during the war; against this logic the "impracticable fanatics" rebelled.

Such was the origin of the Woman Suffrage movement.

Its results thus far, as summarized by Dr. Hammond, may be briefly stated thus: The "spirit of fairness" (evoked by this disreputable agitation) has allowed woman to earn her own livelihood in almost any field she may choose, has permitted her to keep her own property, and has given her a qualified suffrage in some States. But now that the "spirit of fairness" has granted all this, Dr. Hammond cries Halt! The revolution must not only be arrested, but, "contrary to the ordinary course of procedure in other revolutions, must go backward." For "grave anatomical and physiological reasons," the law of social progress must be reversed. In what particulars the "spirit of fairness" has gone too far, Dr. Hammond does not mention. It may be inferred, however, that the hysterical being who can reason neither exactly nor abstractly, nor without prejudice, is unfit to perform any serious business of life unless under constant supervision. Yet, in the Doctor's opinion, the very absence of rationality fits woman preëminently for the most solemn and responsible of all duties — those of the mother.

To consider Dr. Hammond's "grave anatomical and physiological reasons" for reversing the progress of civilization is to pursue a path oft trodden, and hence wearisome to those who have given any thought to the question here debated. Unfortunately, the reiterated words of the best expositors of the movement, like the condemnation of the absentees in the pastor's sermon, reach only the ears of those already convinced. Briefly, the facts and arguments of Dr. Hammond's school are these: The average brain-weight of man is universally admitted to be greater than that of woman, and, according to the *ex cathedra* utterances of Dr. Hammond, the brain of man is of finer quality than that of woman. In many instances, large brains have been more productive than small ones. It follows from these data, that women cannot reason as well as men, and ought, therefore, not to vote. Now, the thinker will see at once a number of breaks in this chain of reasoning. The first query that suggests itself may be stated thus: Can it be shown that large brains are so often coincident with superior intellectuality as to make the possessor of a large mind and a small brain exceptional? The answer is that it cannot. Again: Is the knowledge of the structure of the brain so well defined that mental capacity may be deduced strictly from a consideration of that structure? The answer is, that it is not. And further: In the absence of such knowledge, has there

ever been any fair test made of the relative mental capacities of male and female? The answer is, that until lately there has been no attempt at a like educational development of the sexes; that the attempt has been made, not by physiologists as a class, but in spite of them; and that the results, notwithstanding all inherited and natural disadvantages on the female side, show an equal progress of the girl and the boy. And, collaterally, it may be well to emphasize the oft-repeated fact, uncontradicted by physiologists, that a man with less than thirty-seven ounces of brain matter is an idiot, while a woman—with a brain of inferior quality, according to Dr. Hammond—is fairly intelligent with thirty-two ounces.

Finally, and of most importance in this discussion, is the question, What relation does the higher mental capacity bear to the right or privilege of voting? Is there any country in the world in which the power of abstract reasoning or the ability to grasp generalities is a test for qualification at the polls? Across the Atlantic, the angle of political capacity spreads from the Russian autocrat at the apex to the holders of the "lodger franchise" on English soil. At one time wealth, at another genealogy, at another religion, has been made the test of the voter; but at no time has the power of abstract reasoning been set up as a necessary condition for the exercise of the highest function of citizenship. Indeed, if an exclusion from the suffrage were made on this ground, and if it were applied, as it ought to be in justice, to both men and women, the polling list would be more than doubly decimated; but no government with such a franchise could, by any stretch of the imagination, be called representative. The most profound thinkers are not always the best fitted to comprehend and to legislate for the wants of those less highly endowed, and the vote of the illiterate laborer is as necessary for the protection of his interests as that of the cultured monopolist is for the broader schemes which accumulated wealth suggests. The votes of both classes, and, indeed, of all classes, are of equal necessity for the well-being of a government which proposes to represent the will, not of a clique, but of the people. In the broadest view, government exists only as the representative of the governed; it is the expression of the will of all classes, and when any class is excluded from the franchise, just and weighty reasons for such exclusion must be shown.

By what process of reasoning are native women over twenty-one years of age debarred, in this country, from the right extended in general to every male of full age who is not an idiot, a pauper, a criminal, or an unnaturalized foreigner? Is woman so incapable of comprehending her own interests as to make her enforced silence necessary for her own welfare? Is her nature and her function in life so like that of man as to need no distinct representation? Or has she been represented vicariously by her male relatives? Dr. Hammond says that woman is incapable of comprehending her own interests. The teacher whose lessons have the largest influence on the character of our legislators cannot understand what constitutes her own advantage. Her hysterical nature, led astray by neurotic impulses, incapable of forming unbiased judgments, may properly sway the new generation, but cannot control itself; and yet the good mothers of the race exemplify the fact that in the one case in which feeling is most dominant—in the love of mother for child—the educator has allowed not emotion but judgment to sway her conduct; and further, if more women than men are hysterical and frivolous, let it be remembered that the “lady” has always been shielded from the necessity of deciding the serious issues of life, the confronting of which serves to mature the character.

To the second query, Is woman’s point of view so like man’s that she needs no special representation, the reply is obvious. Woman is so unlike man in her physical, mental, and social nature that she needs preëminently a special representation.

Thirdly, has she been represented vicariously? The common and statute law which allowed her husband the control of her private property, which gave her separate earnings to a drunken husband, which declared that upon her husband’s death she was not the natural guardian of her children, offers speaking examples of the so-called vicarious representation. That many wrongs have been righted without the influence of the ballot is due to the much denounced agitation which has addressed itself to men’s “spirit of fairness,” and to the obvious need of silencing the demand for the suffrage by remedying the most glaring evils which the denial of that right entailed.

The suffragists of the United States have met with the usual derision and maltreatment that await reformers. The fair name of their women has been defamed, the actions of the

men misrepresented. It is true that now and then some seeker for notoriety, some loud-voiced advocate of liberty for lawless purposes, has thrust himself or herself into the ranks; but the body of suffragists are, and have been, men and women known for the spotless purity of their lives, and for an unfaltering purpose in promoting what they believe to be a sacred cause.

The status of the Woman Suffrage movement is simply this: It asserts the primary right of every human being not obviously incapable of appreciating his own interests—and hence, indirectly, the interests of society—to a voice in his own government. It denies to any one the right of presenting an *a priori* case against woman's capacity, holding that brain structures are not reliable standards of qualifications for voting, and that all fair trials of mental endowments, thus far, have shown that the mind of the girl is as good as that of the boy. It affirms that taxation and representation are inseparable, and claims that women who pay both direct and indirect taxes are entitled to the same civil rights and privileges that the men of the Revolution demanded from the stubborn king who claimed to know what was best for the interest of his refractory subjects.

The Woman Suffrage movement declares that all the issues involved in the right of men to vote, and all the powers dependent upon it, are of equally profound importance to women. If the ballot is the scepter of kingship which dignifies man with a noble responsibility, it is no less to her who must teach him the moral duties entailed by that responsibility. She may make mistakes in the exercise of her new prerogative, but in the wider field of activity to which she is called she will gain the kind of culture that will enable her to become a better, because a more clear-sighted, mother. The suffragists hope that the same refinement that has been noted in all public movements, in which men and women work conjointly, will purify the political meeting and the ballot-box. The example of Wyoming encourages them in this hope. They demand that woman shall have equal (some think, coördinate) facilities with man in preparing for and pursuing any calling she may choose. Not restriction, but competition, will determine the sphere of every human worker.

Finally, the suffrage party endeavors to purify marriage and ennoble motherhood, by insisting that a liberal education and liberal opportunities for gaining a livelihood shall prevent marriages that are not unions of respect and affection. It resents

as an insult the insinuation that women are becoming too finical as regards the qualifications of husbands, and that the alternative of womanhood is to marry or to starve. It directs attention to the means for preserving physical health, and lays the axe at the root of social immorality.

Such is the status of the revolution which "ought to turn backward."

NINA MORAIS.

MRS. UNDERWOOD.

IN an article in the *NORTH AMERICAN REVIEW* for August, Dr. Hammond gives what he calls "grave anatomical and physiological reasons" why woman's desire for "unrestricted suffrage" and expectation of "holding political office" should be disregarded, and also why the limited suffrage she already possesses should be taken from her. As he expresses it, "contrary to the course of procedure in other revolutions, this one should go backward."

The first of these "grave anatomical and physiological reasons" we find to be the oft-stated one that "the brain of man is larger than that of woman." Would not this argument apply to man against man as well? If so, how will Dr. Hammond explain such instances as the following, which are by no means uncommon?

"Dr. Haldemann reports, in the '*Cincinnati Lancet*' and the '*Popular Science Monthly*,' that the brain of a mulatto who died lately at Columbus, Ohio, weighed 68 $\frac{3}{4}$ ounces, or nearly 5 ounces more than that of Cuvier. The man was 'illiterate, and not very intelligent.' The latter journal mentions also the case of a bricklayer, whose brain weighed 67 ounces, but who could neither read nor write."

That the Doctor believes in the exploded theory of brain-weight determining the amount of intelligence in individuals is further shown by his attempt to explain the superiority of some women in his admission that "the brains of some women are larger than those of some men, just as some women are vastly superior mentally to some men"; but he fails to show that the particular women whose brains are larger than some men's are the women who are mentally superior to the men whose brains weigh less than theirs. In another phase of the brain question he seems to think he has found a stronger proof against woman's

intellectual possibilities. "The female brain," he avers, "is not only smaller than that of man but is different in structure, and this fact involves much more as regards the character of the mental faculties than does the element of size." To this we will let Dr. Louis Büchner, the widely known German physicist and author, reply. He says:

"The smaller stature and weaker muscular development of woman, as well as the smaller diameter of the nervous threads which converge in the central parts of the nervous system, quite naturally cause the total mass of the female brain to be comparatively smaller, without necessarily causing the development of energy of the parts of the brain devoted to the intellectual functions to suffer. In the second place, even if it could be demonstrated that these parts remain in their development behind those of man, this may just as well be ascribed to defective exercise and cultivation as to an original deficiency. For it is well known that every organ of the body, and therefore also the brain, requires for its full development, and consequently for the development of its complete capability of performance, exercise and persistent effort. That this is and has been the case for thousands of years in a far less degree in woman than in man, in consequence of her defective training and education, will be denied by no one. . . . Finally, in confuting this objection, a point must not be forgotten, to which attention cannot be too often called, namely, that the estimation of the intellectual value of a brain depends not merely upon its size or material bulk, but equally, if not even more, upon its internal constitution and the finer development of its individual parts, and that it is perfectly conceivable that the female brain as regards this fineness, and in accordance with the greater fineness and delicacy of the female body generally, may exceed the male brain in the same proportion as the latter exceeds the female brain in its development in size."—"Büchner's Man in the Past, Present, and Future," pp. 205-207.

We refer Dr. Hammond also to the discussion on this point between the eminent German anatomists and physiologists, Bischoff and Bruehl, the first of whom took Dr. Hammond's position, while Dr. Bruehl denied that any anatomist had yet been able to determine the sex of a brain from the configuration of its convolutions.

But the supreme obstacle to woman's pretensions to the franchise the Doctor finds in "a peculiar neurotic condition, called the hysterical, which is ingrafted on the organization of woman," which is "the result of the advanced development of the emotional part of her nervous system," and which "is at any moment, and often from slight causes, liable to burst out into unexpected and uncontrollable paroxysms in which all the mental and physical faculties are perverted from their normal course of action

and thrown into a condition of the most astonishing turbulence," and therefore "entirely unfits her for emergencies, or difficult situations in general." That women, by reason of the conditions under which they have been held in the past, are more prone than men to nervous excitement is true, but it is not true that these nervous tendencies have been developed to the extent claimed by Dr. Hammond, nor would those tendencies have any appreciable effect on woman's political opinion or action. In all the most perilous crises of life, common to men and women alike, women have been found as likely to act with dignity, sound judgment, and promptness as men.

"A strong point in the mentality of woman," Dr. Hammond concedes, "consists in her intuitions. . . . She will often 'jump' at a correct conclusion with a wonderful degree of promptness and accuracy, which reason would reach with slowness and difficulty, if at all"; but he confesses that he perceives "nothing intellectual about the process," which confession marks the limitations of Dr. Hammond's knowledge of what intuition really is. Those who have studied intuition the most closely are agreed that it is experiential in its origin, and dependent for its existence primarily upon those slower intellectual processes commonly called reasoning. Intuition is judgment wherein "the relations seem to embody experiences which are not specified, or cannot now be specified, although originally they were capable of being so." It is experiential in the race but connate in the individual, and strong as an aptitude in those directions in which the reasoning powers for centuries have been continually exercised; for instance, in women, those demanding insight into motives and character. Says G. H. Lewes, than whom none have given this subject more careful study:

"Intuition under its ideal aspect is judgment. . . . The conclusion which is seen so rapidly that its premises are but faintly or not at all recognized, is said to be seen intuitively; it is an organized judgment. . . . In the perception of an object we are unconscious of the many evanescent muscular feelings by which its distance is estimated and its shape inferred. These relations are intuited, and because the judgments are so rapid and so inevitable, we regard the perception of distance and the shape of the object as given in an immediate apprehension. Analysis, however, discloses that the evanescent processes of which we are unconscious must have taken place, and in the early days of experience the processes took place slowly, consciously. All our other intuitions are organized experiences, groups of neural processes which originally were isolated."

Thus the intuitions of woman cannot be so unintellectual in their nature as Dr. Hammond would have us think.

Another of the "grave anatomical and physiological reasons" which forbid women meddling with politics, according to Dr. Hammond, is her incapacity for mathematical studies, which he thus states :

"It is owing to this difficulty of being exact that the female mind experiences overwhelming obstacles in the study of mathematics. It is not a matter for surprise that the school-girl, under the idea that she must pursue the same course of study which experience has shown to be most advantageous for boys, suffers with headache and other symptoms of disordered cerebral action when she ventures into the domain of spherical trigonometry and the differential calculus."

In astronomy, a science largely based on a thorough knowledge of the higher mathematics, three women in recent times have made their names memorable through their high attainments and discoveries. Their mathematical studies evidently did not injure their health or cause any "symptoms of disordered cerebral action," for they were women of exceptional health and longevity. Mrs. Somerville died at the age of ninety-one years and eleven months, and was active in mind and body up to the day of her death; Caroline Herschel lived to be nearly ninety-eight, with all her mental faculties unimpaired; Maria Mitchell is now sixty-five years old, and until within the last two or three years never knew a sick day; while hundreds of other women are to-day engaged in mathematical studies as severe as those of any male students, and with no more consequent evidence of "disordered cerebral action"; Professor Laughlin, Professor of Political Economy in Harvard, says, in regard to the students of the Harvard "Annex":

"The first year of the establishment of the plan for the collegiate instruction of women the largest single course fell to me as instructor in political economy. To six ladies I gave a course identical with that followed by one hundred and eight under-graduates, chiefly from the Junior and Senior classes of Harvard, so that it was natural for me to make comparisons in regard to results. So far as marks signify anything, those received by this class of ladies, graded on the same scale with the young men, were somewhat higher for the former than for the latter. And I may add that the courses in political economy are regarded by under-graduates in college as among the most difficult in the curriculum."

Dr. Hammond clinches his argument as to the inexactitude of women by the statement that on this account "life insurance companies decline to issue policies to her. For the like reason many corporations which loan money will not lend to women, though the securities be as good as gold itself." To say nothing of the inconsistency of the statement that corporations will not lend to any one when the securities are "as good as gold," the assertion in regard to insurance companies can be abundantly disproved, the Equitable Insurance Company, for instance, having thousands of women among its policy-holders; and the only cases in which higher rates are demanded from women than from men are those during the child-bearing period, and then not on account of woman's "inexactness," but because of the greater risk to life during those years; and those rates are no higher than are demanded of men who follow precarious occupations, as sailors, commercial travelers, or railroad men.

Dr. Hammond declares that women are "entirely wanting in that type of mental organization known as the 'judicial mind.'" Also, that, although there are certain offices "of a clerical and routine character," for which the sex is fitted, yet "those in which force of intellect, a power of disinterested judgment, and enlarged views of public policy are required must ever continue to be occupied by man." No position can test more seriously these qualities than the governmental power possessed by the rulers of nations. The law of primogeniture in monarchical nations has in certain instances forced upon women this power. To accord with Dr. Hammond's theory, the reigns of queens and empresses should have proved more disastrous to the interests of their respective nations than those of kings and emperors, for in no case could there be any choice of women of exceptional ability to fill positions determined only by ties of consanguinity and priority of birth. Of the four queens who have ruled England, none were weak-minded or vacillating, and the reigns of Elizabeth and Victoria form two of the most splendid epochs of English history. Five of Russia's sovereigns have been women. One of these was Olga, surnamed "the Wise"; Catherine, the widow of Peter the Great, a charming and brilliant woman, was called "the Russian Aspasia"; and Catherine II., though headstrong and somewhat cruel and vicious, was a woman of great intellect and the liberal patron of science, art, and literature; under her rule Russia made prodigious progress. In 1338,

Margaret, Queen of Sweden, styled by historians "the Semiramis of the North," by her warlike prowess and wise policy, united for the first time Sweden, Denmark, and Norway under one government, of which she was the head, and which she raised to a high pitch of glory. To the liberality of thought and purse of Isabella of Spain is due the discovery of this continent, while no German monarch accomplished more for the honor and glory of his country and people than Maria Theresa of Austria. If we turn back to an earlier period of history, we find record of the brilliant reigns and noble deeds of Boadicea, Semiramis, and Dido; while even among the Jews, Deborah, a prophetess, was made one of the ruling judges of Israel because of her wisdom; and it was to the tact of a Jewish queen that the race once owed its salvation. And yet Dr. Hammond, on the strength of his "anatomical and physiological" reasons, would have us believe that women are "entirely wanting in that type of organization known as the 'judicial mind.'"

Having proved, as he thinks, that women are lacking in the "judicial mind," he owns that the franchise ought to "carry with it the right to hold any office" for which they "have the privilege of voting"; and since, in his opinion, women are not fit to hold political offices, they should therefore not be allowed to vote. Even admitting the truth of his theory in regard to the incompetence of women to hold office, Dr. Hammond's argument does not hold good. Every male voter, no matter how ignorant, besotted, or vicious he may be, has the right to hold the highest office for which he votes, provided his fellow-voters wish to bestow it upon him. Dr. Hammond knows that, in comparison with the number of voters, the number of offices is small, and that only such men are elected to fill those offices as are thought by their fellows to be best fitted to hold them. Dr. Hammond may rest assured that if women are, as he says, so totally incompetent to perform the duties incumbent on any political position, they will never be voted into such position. But if, perchance, some woman should be found more capable of filling such office than any other male or female voter, common justice would require that she be allowed to accept the place.

• One more point. The Doctor would lead us to infer, from the tone of his article, that "woman in politics" was an untried problem. While denied the franchise, women have always taken a more or less active share in the politics of all nations, and men

have been very glad to invite and accept their aid in all national or individual political crises. In the French revolutions, in Russia's Nihilism, and in the Irish struggle for independence, women have been active and prominent. In English election canvassing, and in American Congressional lobbying, woman's part is well understood and welcomed by those for whom they work. It is time for woman's political services to be justly recognized, and her full coöperation in politics invited and encouraged, by giving her the right to assert her own individual political preferences through the ballot.

SARA A. UNDERWOOD.

DR. LOZIER.

REVOLUTIONS and reforms make the greatest strides when opposition is fiercest and the true nature of the foe is known. In order to win with fair minds, it is often quite sufficient that the opposition display its weapons and animus; then the case may at once be submitted to the enlightened moral sense of mankind. Error ever encases itself in an armor of sophistries, glittering generalities, and unsupportable assertions, and fancies itself invincible. Now and then a mighty man of valor stalks forth from the camp of the Philistines, clad in triple brass, and challenges the reform host, but Israel is not greatly dismayed. Some simple keeper of a flock among them may cope with this new Goliath of Gath.

And now comes Dr. William A. Hammond, a gentleman high in medical councils, who, in the *NORTH AMERICAN REVIEW* for August, declares that the size and quality of woman's brain, and her "neurotic, hysterical" organization, unfit her to choose her rulers, and seriously incapacitate her "to rule others." He weighs her brain and announces that she has too little by several ounces. He shows by medical records that in eighty-one adult brains of both sexes, the ratio between the weight of the brain and that of the body is almost identical, being in man 1 to 36.50, and in woman 1 to 36.46. He then cuts down through the cerebral convolutions, gray cortical substance and sulci, and from the number, configuration, and depth of these infers that women never ought to vote. They should remain the subject class! He might have said, the victim class, for so surely as any class wrongfully rules another class, that class will

be victimized. The argument from superior force is unworthy of this age, and will bring ruin to any nation or home. Perhaps some day a woman anatomist will dissect the brains of several men, and discover wonderful twists in their convolutions, or absence of them, or thickening of the cranial plates or diploë, which, in her estimation, will disprove their ability to vote or to rule. After much tabulating, the Doctor gravely concludes that absolute, and not relative brain-weight, always has governed, and always will and should govern the world. He has proved that the ratio between the weight of body and brain is almost precisely the same in both sexes. He admits that some women have larger and finer brains than some men. If absolute brain-weight is to be the qualification for suffrage, then it follows that only persons of greatest avoirdupois are fitted to rule. The fat men's club hereafter must bear sway.

Admitting all he says, the reason is more urgent that women should vote. Just government is established for the protection of the weak, and they, preëminently, should have a personal voice in it. In a true democracy, the question of sex, size, color, property, education, vocation, or race has nothing to do with the inherent right of each individual citizen to be heard in the choice of his or her rulers. Our Government is not a democracy. It is an androcracy. Men rule. The majority even does not rule, for the census shows that women are in the majority in many States. Notwithstanding man's claim to represent woman, cruel laws oppress her. In this State of New York no wife has a right to her offspring, though for them she may have jeopardized her very life. Her husband can legally snatch them away, even in infancy. Nay, he can will them away before their birth. The only child a mother has a right to is an illegitimate one. If women were legislators, would such laws disgrace our statute books? A woman sits disfranchised while a drunken pauper may vote to so open a road as to confiscate her house. Yet Dr. Hammond coolly says of woman, "Her person and property are as well protected as those of man."

Again: Dr. Hammond thinks that man's front brain, the part that is chiefly concerned in mentality, is longer and larger than woman's. Of course, as the size of the brain is proportioned to that of the body, and as women are generally smaller than men, we should expect this. It proves nothing. The Doctor seems unaware of facts recorded in the annals of surgery, which show

that a portion of this fore-brain may be destroyed and yet the intellect remain unimpaired. We might more reasonably claim that woman's structure appears more complex than man's. Comparative anatomy demonstrates highest complexity as indicating highest type. Conceding evolution and revelation, woman, being last created, represents the highest divine work.

Physiology can never decide morals nor political rights; intelligence might. A million illiterate blacks and foreigners now vote; woman ranks with "minors, idiots, criminals, and Indians untaxed." Perhaps Dr. Hammond would gallantly rescue her from this deep degradation. Craniology establishes no test of ability. A man representing exact science ought to be exact. One fact often upsets many theories. Byron, Gambetta, Emerson, had notably small brains. Some idiots have large brains. According to Broca, an excellent observer, men possessing less than thirty-seven ounces of brain become idiots, while women do not till the weight falls below thirty-two; therefore, woman's brain must be finer. Similarly, the negro's elongated heel and thick cranial bones were thought to prove his unfitness for freedom. If Dr. Hammond finds a vast difference between woman's brain and man's, surely man can never truly represent her. If Dr. Hammond's method should prevail, let all voters and candidates take to the polls accurate tape measures and scales and settle politics mathematically. But this can only be done by knocking out each other's brains, since measurements vary with thickness of skull.

He seriously objects to woman's enfranchisement, because short-haired women and long-haired men and "fanatics," unhappily married, were chiefly its early assertors. Fifty years in reform work convince me that this is entirely incorrect and irrelevant. The world often misrepresents, and sometimes crucifies, its saviors.

But woman is an "emotional" being, and Dr. Hammond's experience as a specialist in nervous diseases has apparently been painful. He says: "To this great preponderance of the emotional over the intellectual nature is due the fact that very few women are capable of an intense degree of abstract thought, no matter how much education they may have received." . . . "No great ideas, no great invention, no great discovery in science or art, no great poetical, dramatic, or musical composition, has ever yet emanated from a woman's brain. There

have been two or three second-rate female painters, and perhaps one first-rate female novelist,—and when that is said, all is said.” We fear the Doctor’s reading has been greatly circumscribed. To Dr. Hammond this statement may seem true, but the reading, thinking world includes more than himself. The great and good women judges and rulers of the ancient and modern world, the women poets, jurists, historians, astronomers, authors, inventors, scientists, artists, physicians, mathematicians, and political economists of this and every age,—an illustrious line, showing that women may be whatever they choose,—he passes by in utter silence. Mrs. Somerville is the one exception he makes by name, and she, he holds, was not essentially great, but was only conspicuous because of being a woman. Such women, he urges, are simply exceptions to the rule; we maintain that they prove what the rule might be for others if they had the opportunity and the encouragement men have had.

Dr. Hammond merits the rebuke of every just mind when he declares woman’s entire inability to tell the truth. We all know that some women are untruthful, and that many men are so habitually. It is quite another thing to say, as Dr. Hammond does, that all womankind is untruthful. “As woman cannot reason abstractly, neither can she reason exactly. She does not, in fact, while having an abhorrence of falsehood, understand the necessity for being exact in the ordinary affairs of every-day life.” . . . “On account of her inability to be exact in regard to her age, the diseases she may have had, her mode of life, and other matters in which exactness is required, life insurance companies decline to issue policies to her. For the like reason, many corporations which loan money will not lend to women, though the security be as good as gold itself.” The gentleman is wholly incorrect. Insurance companies insure women’s lives at slightly advanced rates, because of childbirth risks. I myself was examining surgeon for the New York Globe Mutual for many years. If some institutions refuse loans to women, it is because they cannot deal severely with widows in case of foreclosure and deficiency judgments without incurring public odium.

Perhaps Dr. Hammond’s practice among sick, weak, abnormally emotional and artificially stimulated patients, forming a wealthy *clientèle*, accounts for his view of woman. If he would step out from examining diseased, neurotic, hysterical cases, and observe healthy women, and visit or read reports of Cambridge,

Harvard, Oberlin, Cornell, Michigan University, and other colleges where girls engage in competitive studies—literary, scientific, and mathematical—with boys, often winning the highest prizes, and that, too, with unimpaired health and mental balance, he would not deliberately state that “the female mind experiences overwhelming obstacles in the study of mathematics.”

. . . “The attempt to convert a woman into a mathematician is generally very much like making a hare drink brandy and soda.”

The learned Doctor thinks, however, that woman's intuitions are not to be despised. “She will often ‘jump’ at a correct conclusion with a wonderful degree of promptness and accuracy, which reason would reach with slowness and difficulty, if at all. There is nothing of intellectuality about the process, so far as we can perceive.” Astonishing! Well, what is it then? The world could wish that male legislators had a little of this divine intuition at the risk of diminished intellectuality. This is conceding to woman an immense advantage over man.

Finally, the Doctor thinks that while suffrage for woman might be tolerated, her right to hold judicial office, which suffrage implies, would be intolerable and dangerous. This is again contrary to all experience where women have occupied such positions. See reports of the governors and supreme court judges and district attorneys of Wyoming Territory, where women have acted as jurors and justices. Governor Hoyt says of woman suffrage, “Under it, we have better laws, officers, institutions, morals, and a higher social condition than could otherwise exist. Not one of the predicted evils, such as loss of delicacy and disturbance of home relations has followed in its train. After twelve years of happy experience, woman suffrage is rooted and established in the minds and hearts of this people.”

Woman's emotional, “hysterical” organization Dr. Hammond compares to a packet of dynamite, explosive whenever disturbed. “Her likes and dislikes,” he declares, “are paramount with her; the question of right or wrong is a secondary consideration. She will sacrifice her own happiness, her life, and all considerations of duty to others and the public at large, for some man whom she loves, and punish with merciless severity those who, though innocent of crime, have desecrated her ideals, or have otherwise rendered themselves unpleasant to her.” This is the most terrible indictment we have ever seen drawn against the mothers,

wives, sisters, and daughters of mankind. The mind and heart recoil from it, and words utterly fail us in view of its enormity. Are women to be fairly represented, ruled and judged by persons having this estimate of them?

Ethics, logic, and revelation favor the claims of woman. Consequently, many distinguished intellects daily acknowledge their validity. Objections disappear. If "politics is a dirty pool," women will purify it. If Bridget will vote, so does Patrick; the great average will correct incidental evils. If men fail to vote, woman's quicker conscience will enforce the duty. If woman cannot bear arms, many men are also exempt. They substitute sons. If many women are unsuited for office, so are many men. If some women undervalue suffrage, others ought not to be deprived of the franchise. If priestly influence is feared, or union of church and state, woman's enlightened conscience and general intelligence will dispel that apprehension. If rum and venality already threaten the Republic, woman's direct co-operation alone can save it. If the humblest citizen is politically defrauded, all citizenship is jeopardized. If the army and navy may be summoned to enforce the sacred political right of a single male citizen, so should it to enforce woman's. If taxation without representation is tyranny, women are cruelly wronged. If governments derive their just powers from the consent of the governed, ours is a usurpation.

No reform has made such rapid progress in public estimation as this. A goodly number of women are seeking the professions; others crowd industrial pursuits; multitudes support themselves and their families. They demand a direct voice in legislation and in the national councils. They will surely soon obtain it. Already the United States are outstripped in the race of freedom. In England, 600,000 women, owning real estate or paying rent, exercise the right of municipal suffrage without provoking revolution or social disturbance, and by a recent close vote nearly won the right of suffrage in parliamentary elections. In glancing over the list of the members of Parliament who supported the measure, we find that it contains the names of the foremost statesmen of England. The cause has, at times, nearly triumphed in our own various legislatures and in Congress. Scan the men on each side, and none can fail to discern the inevitable drift of the times toward the speedy enfranchisement of woman. The Republic needs woman suffrage more than women do. Too

long in legislation has the head been divorced from the heart. Women also need the franchise quite as much for their education, personal self-respect, enlargement of view, and activity, as for gaining and maintaining their rights. Responsibility always educates. As woman in the march of the world's reform is last to be elevated, so may she be first in securing for it its final triumph in good government and the establishment of peace and prosperity on earth.

CLEMENCE SOPHIA LOZIER.

NORTH AMERICAN REVIEW.

No. CCCXXV.

DECEMBER, 1883.

GOVERNMENT CONTROL OF THE TELEGRAPH.

THE telegraph wires extend over the length and breadth of our country; wherever the traveler journeys, or commerce is carried on, there the telegraph office is found. Though the correspondence by telegraph is increasing more rapidly than that by mail, yet it is under no governmental control except by State legislation. Unfortunately, the laws of the several States are sometimes conflicting with one another; and no State has the power to legislate for a business which extends into every State and Territory, and to every quarter of the habitable world. In this article I shall show the growth and importance of this business, the evils of the present telegraph system, their cause, and the remedy.

The Western Union Company practically monopolizes the telegraph business of the country. The growth of the telegraph is shown by the statistics of the business of this company from its re-organization, in 1866, to the present time. The telegrams have increased from 5,000,000 to 40,000,000, the capital from \$20,000,000 to \$80,000,000, the gross earnings from \$6,000,000 to \$19,000,000, the wires from 75,000 miles to 432,000 miles. The telegrams have doubled every six years, and now equal in number the letters transmitted by the Post-office in 1843, when Congress made an appropriation for the construction of the first telegraph line; and the revenue for the year ended July 1, 1883, is larger than that of the Post-office Department in 1870.

The importance of this business transcends its magnitude; for every political, general, or local item of interest is sent by telegraph, and upon this news every daily paper depends for existence. The prices of every market in our country are daily regulated by its reports. Every important business transaction between parties at a distance, and the most important and vital social communications, are carried on by telegraph.

This business is well and promptly conducted. Though complaints are often made of the service, and sometimes with justice, a pretty extensive use of the telegraphs of England and the European continent during the last four years has convinced me that telegrams are sent more rapidly, and with fewer errors, here than abroad. As a telegraph for business, where dispatch is essential and the price is of little account, the Western Union system is unrivaled; but as a telegraph for the people it is a signal failure. Its advocates say that it costs more to send a telegram between two cities in different countries of Europe than between two places in America no further apart, and that therefore the telegraph is cheaper here than abroad. This is true, so far as interstate telegrams are concerned, for it is the policy of the European governments to make the rates low within their own jurisdictions and high elsewhere; and as high rates greatly restrict the business, comparatively few telegrams are sent between different countries. Even between France and England, where there is constant business and social correspondence by mail, comparatively few telegrams are sent.

A comparison of the telegraph business of America with that of several of the countries of Europe shows that the telegraph is used more freely in England, Holland, Belgium, and Switzerland than with us, and more largely in proportion to letter correspondence in France. The rate in England is twenty-five cents for twenty words; with us, the average rate is thirty-eight cents for ten words. In Holland, Belgium, and Switzerland, the rate is about ten cents per message. On the continent of Europe, more than two-thirds of the telegrams are on social matters, resembling in this respect letter correspondence; in our country, less than twelve per cent. are on social matters, about eight per cent. press, and the remainder, eighty per cent., are business messages. Thus, the great difference between the telegraph systems of Europe and America is, that abroad the telegraph is used principally by the people for social correspondence, here by business men for business purposes.

The limited extent to which the telegraph is used in our country, in comparison with England and several other European countries, is due to want of uniformity in the rates, to high charges, to the discrimination in favor of business telegrams, and to the fact that ours is a business and railroad system, while those abroad are postal systems. The want of uniformity arises partly from competition, the rates having been reduced between competing points and retained between other offices—for instance, the rate from Washington to New York is fifteen cents; to other offices at no greater distance, forty cents—and partly to the fact that the rates are higher in the South than in the West, higher in the West than at the East, and higher between many small places than between many cities and small towns. For instance, the rate from Washington to Lynchburg, 180 miles, is forty cents; Chicago to St. Paul, 400 miles, fifty cents; from New York to Buffalo, 450 miles, thirty cents. The rates are not only high, but the annual reports of the Western Union Telegraph Company for the five years ended July, 1883, show an apparent steady advance in the average rate from forty-one cents in 1878 to forty-six cents in 1883, an increase of over ten per cent. I was so much surprised at this increase that I wrote to Dr. Green, the president of the Company, stating the result of my investigations, and received the following reply, which is printed with his permission:

“EXECUTIVE OFFICE WESTERN UNION TELEGRAPH COMPANY,

“NEW YORK, Sept. 19, 1883.

“MY DEAR MR. HUBBARD:—I hasten to acknowledge your favor of yesterday, and explain to you why the gross revenues and gross expenses are not any longer a proper basis for ascertaining the average cost and average receipts per message, unless you want to include the Atlantic and Cuba cable service, which, at the rate of fifty cents per word, materially increases the average receipts per message, and with the rentals paid therefor, and expenses of operating, largely increases the cost per message, whilst neither adds anything at all to the number of messages, for all messages passing over either pass also over Western Union lines proper.

“I find there is included in our revenue the earnings of the American cables, about \$1,100,000; of the Gold and Stock Telegraph Company, for sale of its news and quotation service, not counted as messages, \$1,417,000; from the I. O. T. Co., for cable messages to Cuba, \$388,000; for rental of lines leased to private parties, bankers, and newspapers, the messages over which are not counted, \$407,000; and for royalties on telephones, dividends on stocks in other companies, etc., about \$700,000; making an aggregate of \$4,012,000 that is not derived from the transmission of messages over Western Union lines in the United States and Canada. This

leaves the revenue from that service about \$15,440,000, and estimating the messages at 44,000,000, yields receipts of about thirty-five cents per message.*

"In like manner, there should be deducted from the total expenses the rentals paid and charged in current expenses: For the American cables, \$700,000; on the outstanding stock in the Gold and Stock and Cuba Cable Companies, \$301,000; and for the cost of operating these three companies, about \$600,000, making an aggregate of \$1,601,000; which being deducted, leaves the expenses of operating the Western Union system, \$10,193,000, and the cost of handling 44,000,000 messages, about twenty-three cents each. This is quite as little cost per message as we have ever before exhibited.

"With the increased volume of business, we have the increased exactions for prompt service, requiring greatly increased facilities and expenditures for handling the bulk of it in a few business hours of the day, with the least possible delay both in the transmission and delivery.

"The figures I have given, as proper to be deducted from the gross receipts and expenditures of the past year, apply also to the greater part of the year previous; whilst during the past three years there have been several hundred thousand dollars per annum added to the expenses in the cost and consequences of vexatious litigations, compelling us for months, both in 1881 and 1883, under restraint of injunctions, to operate separately the properties we had absorbed, at largely increased expense.

"I trust these figures and suggestions may assist you in arriving at fair conclusions for the correct information of the public.

"Respectfully and truly yours,

"NORVIN GREEN, *President*.

"GARDINER G. HUBBARD, Esq., Cambridge, Mass."

In my estimates for 1878 and 1883 I have included all the earnings of the Company, whether derived from the cable business, the Gold and Stock Company, and the Inter-Ocean Cable Company, or from private lines, and divided these earnings by the total number of messages. The only difference, so far as I am aware, between the estimates for 1878 and for 1883, is that the latter include a larger proportion of earnings from the cable business, as in 1878 the Western Union Telegraph Company did not lease either of the Atlantic cables.

The reason assigned for the existence of higher rates here than in England is that there the average distance of transmission is only about fifty miles; here, 150 miles, or three times as far. But the cost of transmission does not increase proportionally with the distance, nor should distance be made the principal element in fixing a tariff of rates. Telegrams are sent from New York to

* The annual report of the Western Union, published since the date of Dr. Green's letter, shows the number of messages to be 41,000,000, the average receipts thirty-eight cents, the average cost of handling per message twenty-five cents.

places within fifty miles of that city at a greater cost to the Company than similar messages sent to Chicago. Cheap telegraph service, like cheap postage, depends for its pecuniary success on low and uniform rates. The same objections were made to cheap postage that are now made to a cheap telegraph; and not until the managers of our telegraph learn that distance is only a minor factor in establishing paying rates, and one that can ultimately be disregarded, can we expect a cheap telegraph.

The very basis, therefore, on which our tariffs are founded is unsound and wrong in principle. It may be asserted as an axiom in the telegraph business that where the rates are high a large reduction will cause an immediate increase in the number, without a corresponding increase in the expense. The statistics of all foreign and home telegraphs prove this fact. It is only necessary to refer to those of the Western Union. From 1867 to 1879, the number of messages increased from 5,879,000 to 25,070,000, or four hundred per cent.; the rates were reduced from \$1.04 to forty cents, or sixty per cent.; the expenses increased from \$3,944,000, to \$6,160,000, or fifty-five per cent.; while the net profits increased from \$2,641,000 to \$4,800,000, or nearly one hundred per cent.

The Company formerly pursued the policy of making an annual reduction in its rates, and of paying for all extensions out of earnings, and for eleven years it made an average yearly reduction in its rates of six per cent. a year. In 1874 it bought over \$7,000,000 of its capital stock, reducing the capital outstanding from \$41,073,400 to \$33,785,675. In 1879 this policy was changed; a stock dividend of \$5,960,608 was made. In 1881 another stock dividend of \$15,526,590 was made, increasing the capital to \$56,555,173, thus requiring \$1,500,000 additional net earnings and a corresponding increase in the rates to pay seven per cent. on this new capital. If the annual ratio of decrease in the tolls had been continued, the average rate at the present time would not exceed thirty cents instead of thirty-eight cents; but the cessation of the reduction of rates and the declaration of large stock dividends went hand in hand, the latter necessitating the former.

The public are not satisfied with our telegraph system, and have tried two methods of obtaining a cheap telegraph. In 1869 resort was had to Congress, and protracted hearings were had before various congressional committees during almost every session until 1877. "The effect of these hostile proceedings against the

Company," Mr. Orton, the president, said, "has been to induce the executive committee to proceed more rapidly with the work of increasing the facilities and reducing the rates than the actual condition of the Company's affairs may seem to justify." In the second place, relief was sought by the construction of competing lines, followed by large reduction of rates between competing points. The public, dissatisfied with the high rates of the Western Union, gladly take a few shares in any new company that offers to reduce the rates, and thus new companies are easily floated. But the oft-quoted remark of Mr. Stephenson, that where consolidation is possible there competition is impossible, was never more truly illustrated than by the telegraph. Again and again competing lines have been constructed, only to be bought by the Western Union. Between 1872 and 1879, the rates between Washington and Boston were reduced by competition four times and raised three times.

It is impossible for competing lines to give permanent relief, as they connect points already provided with telegraphic facilities, so that they merely duplicate the lines, offices, and employes. Three competing companies in Washington have offices in the same square, and as many parallel lines north and west. These three companies afford no greater facilities than one, and as that one can do all the business, these new lines add to the public burden by the amount of capital and the operating expenses of the competing lines.

Of all the consolidations, the recent ones have been the most unfavorable to the public. In 1881, \$8,400,000 of stock of the Western Union was issued in exchange for the capital stock of the Atlantic and Pacific Telegraph Company (\$14,000,000), over one-half of which was then owned by the Western Union Telegraph Company, and \$15,000,000 for the stock and bonds of the American Union Telegraph Company. It is difficult to ascertain what was obtained for these large sums. The controlling interest in the Atlantic and Pacific Telegraph Company was purchased by the Western Union, in 1878, for \$25 per share, or \$1,806,250, and the remaining shares were probably worth no more in 1881, though they were then purchased for \$60 per share.

By examination of the annual reports, we ascertain what new lines have been constructed or purchased each year, and the cost thereof. These reports should, therefore, show what lines the Western Union purchased of these companies in 1881, and

their value. The additions to the equipment in 1880 were 2658 miles of pole line, 21,968 miles of wire, and 543 offices, at a cost of \$1,123,584. In 1881, 24,695 miles of pole, 93,368 miles of wire, and 1660 offices; expenditure for equipment, \$1,041,657. In 1882, 20,720 miles of pole, 47,107 miles of wire, and 1331 offices, at a cost of \$1,037,000. The cost per mile of wire in 1880 was \$51; in 1882 it was much less. In 1881, the year these companies were consolidated, 46,171 more miles of wire was added to the equipment than in 1882; at \$51 per mile, this was worth \$2,354,721. It does not appear that any other additions to the property of the Company were made, nor does the Western Union seem to have obtained any accession to its business, for the increase in the number of messages was no greater than the normal growth of its business. The Company, therefore, seems to have obtained property worth about \$2,500,000 for \$23,400,000, while they have "several hundred thousand dollars per annum added to the expenses in the cost and consequences of vexatious litigations, compelling us to operate separately the property we had absorbed." Consolidation invited further competition, for the Mutual Union was organized, and in 1883 the Western Union leased its lines for 999 years for an annual rental of \$500,000, thus adding another weight to the burden to be borne by the public. Nor did the Western Union then obtain a monopoly, for new competitors have started up, anxious to be consolidated. The effect of the various consolidations and stock dividends is forcibly shown by a tabular statement:

The capital of the Company prior to its re-organization in 1866 was	\$10,000,000
At that time it was increased by the issue of new stock for shares in other companies	20,568,000
It has been subsequently increased by the issue of new stock for shares in other companies	20,330,000
For stock dividends in 1866	10,000,000
For stock dividends in 1879	5,960,608
For stock dividends in 1881	15,526,590
For stock dividends in 1881, on account Atlantic and Pacific Telegraph shares owned by the Western Union and then divided	4,320,000
	\$86,805,196
Less stock of the Company purchased in 1874....	6,805,196
	\$80,000,000

The stockholders have received—

Cash dividends, since 1866	\$34,000,000
Stock dividends “ 1879.....	25,817,198
And the Company had on hand, June 30, 1883, available assets toward future stock dividends	15,039,000

Total dividends and undivided assets since January 1, 1866..... *\$74,856,000

Since 1867, the public, besides contributing these cash dividends and assets, has paid \$110,000,000, the operating expenses of the Company. The sum of \$20,330,000, expended in the purchase of rival lines, represents a part of the cost to the public of its vain efforts, since 1867, to procure by competition a reduction of rates. These rival lines, when purchased, become a source of expense to the Western Union, as they are generally poorly constructed, and merely duplicate existing lines; still, as they block other competitors from using the routes, they are maintained. The lines, since 1866, have been constructed, and the business developed, at the expense of the public for the benefit of the shareholders of the Western Union Telegraph Company, who have not been called upon for any fresh capital. Railroad companies have made great extensions in the same period, but with scarcely an exception they have been made by fresh capital derived from the issue of stock and bonds.

The excuse for consolidation has been that the expenses were thereby reduced, but the recent consolidations have had the opposite effect. From 1868 to 1880 there had been a regular annual reduction in the average cost to the Company of transmission per message from 63.4 cents to 22.3 cents; total reduction, 41.1 cents per message, and this reduction would probably have been continued to the present time but for these consolidations. Dr. Green, in his annual report, estimates the expense per message at the present time at about twenty-five cents, or more than it was in 1880; while my estimate, made by dividing the expenses by the number of messages, is twenty-nine cents. The stock issued for the purchase of competing lines and for stock dividends, as above shown, was \$46,036,000, the dividends upon which amount to \$2,830,000; and the rental of the lines of the Mutual Union Company amount to \$500,000 more; total,

* These tables are made up from reports of the Western Union Telegraph Company for different years. The figures are believed to be substantially correct.

\$3,330,000 per annum. Dividing this by 41,000,000, the number of last year's messages, we find the tax to the public, on account of the consolidations, to be 8.1 cents for each message.

I do not know of a dividend ever having been paid by a competing company except from capital, and I believe that the annual operating expenses of these companies, including a due allowance for depreciation, have always exceeded the income. It is, therefore, evident that if the Western Union had expended the above sum of \$3,330,000 in reducing rates, it would have crippled the competing companies and compelled them to wind up or sell out to the Western Union at a fair price. Such a course would have prevented, instead of inviting, future competition.

Another great evil of the present system is the unrestricted and almost despotic power of the Western Union Telegraph Company. It transmits press news, amounting to about 100,000,000 words a year, or 3,330,000 messages; or, counting the drop copies and multiple deliveries of the same reports, about 800,000,000 words. For this service the Company receives about the same compensation per message that it receives for the transmission of average messages. The Company has in times past discriminated in its rates to the press; it has raised the rates to newspapers that criticised its action or favored opposing telegraph systems; and what it has done it possesses the power to do again.

One of the bureaus of the Western Union Telegraph Company daily collects the prices of all staples in the principal markets of the world, and transmits them to its customers in all our large cities; the farmers and cotton producers daily receive the market price of wheat and cotton. These reports were formerly collected and transmitted by private parties, but when the Western Union embarked in this business they bought out most of the parties engaged in it. One of them was unwilling to sell; whereupon the Western Union sent his messages in such a way that they were not received until about an hour after the receipt of similar news from the Western Union bureau, and thus the man was ruined. I believe this bureau is fairly and honestly managed, but it has unlimited control over these dispatches, and this power can be used for private ends.

The telegraph in America is peculiarly a business system; eighty per cent. of the messages are on business matters, great facilities are given to these interests, and discriminations and

preferences made in their favor. Exchanges in different cities are connected by through wires, and messages sent directly from one exchange to another, the operator receiving the order to buy or sell, which is executed the same instant at the other exchange, neither message nor answer being reduced to writing. The managers of the telegraph know that their business customers want the quickest and best service, and care more for dispatch than low tariffs. The public cannot pay these high rates for social correspondence, and therefore do not use the telegraph.

In the early days of telegraphy, the railroads were inestimable aids to its rapid growth; the railroads soon appreciated the value of the telegraph in running their trains, and contracts were made by which great privileges were given to the telegraph company. Then competing companies made liberal proposals to the railroads, and as the old contracts matured the railroads insisted on more free wires on their own lines, and more "dead-head" or "half-rate" messages to points off their lines. The Western Union was compelled to accede to these terms, or give up the lines to the competing companies. The conditions demanded by the Pennsylvania Railroad were so stringent that on the expiration of the contract with that company, a few years ago, the Western Union refused to accept them, and a contract was made with the American Union, then controlled by Mr. Gould. On some of the roads, the New York Central for example, the railroad retains the ownership of the telegraph lines, with the exclusive use of certain wires and the right to use others when required by its business. The only telegraph offices in small towns are at railroad stations, operated and maintained by the railroad. This saves some cost to the telegraph company, but at the expense of the public, for these offices are often at considerable distances from the business centers, and messages are frequently interrupted and delayed by railroad dispatches. When the English Government took over the telegraphs, they severed connection with the railroads and established independent lines, generally over the highways.

The Western Union Telegraph Company, not content with the telegraphic system of this continent, leased the Atlantic cables of Mr. Gould, and through their control of the business from America to Europe forced the European cable companies to pool the receipts of the cable business of both worlds. Its

business has thus become co-extensive with the commerce of the country. It is evident, from a mere statement of this fact, that no State legislature can deal with this business, for the laws of a State have no vitality beyond the State limits. This doctrine has been repeatedly affirmed by the Supreme Court of the United States. That tribunal has recently decided that laws of California, regulating the rates on lines of steamers navigating the Pacific Ocean were invalid, even though the vessel only plied between two ports in that State, for the United States have exclusive jurisdiction on the high seas beyond one league from the shore. Fortunately, Congress has full power. The Constitution gives Congress power to establish post-offices and post-roads, and the Supreme Court of the United States has decided that this power embraces the entire postal system of the country.* The first resolution passed by the Continental Congress in relation to the post-office was on May 25, 1775, as follows :

“As the present critical situation of the colonies renders it highly necessary that ways and means should be devised for the speedy and secure conveyance of intelligence from one end of the continent to the other, *Resolved*, That Mr. Franklin and others be a committee to consider the best means of establishing posts for conveying letters and intelligence through this continent.”

The power of Congress to construct post-roads, to own and operate lines of stage-coaches for carrying the mails and passengers, to construct and operate lines of telegraph, has, I believe, rarely been doubted. Under Jefferson and his successors, appropriations were made for the construction of the National or Cumberland road, and surveys made for a post-road south, through South Carolina, Georgia, and the Gulf States to New Orleans. In 1801, the mail was carried between Philadelphia and Baltimore in a line of stage-coaches established and operated by the Postmaster-General. In 1819, Mr. Calhoun, then Secretary of War, recommended Congress “to construct a judicious system of roads and canals for the convenience of commerce and the transportation of the mails.” In 1824, an act was passed making appropriations for surveys and estimates for roads and canals for the transportation of the mail. In 1843, and several years succeeding, Congress made appropriations for the construction and operation of lines of telegraph. In 1866, an act

* 96 United States Reports, 11, *Pensacola Co. vs. Western Union Tel. Co.*

was passed providing for the purchase and operation of any and all telegraph lines of companies accepting the provisions of that act. The precedents are thus continuous from the fathers of our country to the present time.

The President of the Western Union says "the telegraph is not a postal service. It does not transport sealed packages or original communications." It would seem that he does not understand the function of the postal service, which, according to an ordinance passed in 1772, and continued in force by successive acts of Congress for many years, is "the communicating intelligence with regularity and dispatch from one part to another of these United States." A telegraph, according to the dictionary, is a "means of conveying intelligence beyond the limits of distance at which the human voice is audible, the idea of speed being also implied." The business of the post-office and the telegraph is the transmission of intelligence between parties at a distance; the only essential difference is in the means of transmission. In the one case the letter, sealed or open, is bodily transmitted; in the other, the contents are transmitted.

Congress, in 1843, appropriated funds for the construction of the first line of telegraph in this country, between Washington and Baltimore, and for two or three years it was operated by the Post-office Department. The Postmaster-General, in his report for 1845, says that the telegraph "is a means of transmitting intelligence accessible to all at prescribed rates of postage," and he adds, "This is an important duty confided to the Post-office by the Constitution; it is an agent vastly superior to any other ever devised by the genius of man for the diffusion of intelligence. The use of an instrument so powerful for good or evil cannot, with safety to the people, be left in the hands of private individuals, uncontrolled by law."

Our Post-office is maintained by the people solely for their benefit, and is better managed, and with more economy, in our country than in any other. The telegraph is run by a private company primarily for the benefit of its shareholders, and is managed with less economy than the Post-office. There is no country where there is the same demand for the telegraph as with us, on account of the great extent of our territory, and the close and constant social and business intercourse between the various sections. It is not as generally used as it should be, because the rates are so high as to prevent its frequent use

between remote places. There is no reasonable excuse for high rates; for, as we have shown, the Western Union would necessarily have continued the annual reduction in its rates, which would have given us a cheap telegraph, if it had not been for its large stock dividends and injurious contracts with rival and other companies.

I will make a concise recapitulation of the evils of the present system, and then point out a remedy. The evils are: (1) high and irregular rates; (2) the monopoly of the business by a single company; (3) the inflation of its capital by stock dividends; (4) the purchasing and leasing of competing and connecting lines and cables; (5) want of economy in the management; (6) identification with railroad and commercial interests; and (7) unlimited control, unregulated by law, of most important business interests.

Abroad, we find a postal-telegraph system, with low, uniform, and diminishing rates, economical administration, a popular, as opposed to a private, system. The only effectual remedy for the evils of our system is governmental control, by the purchase of the telegraph lines, or by the establishment of a postal telegraph with low rates, or by the enactment of laws regulating the present system. The purchase of the lines of the telegraph companies has been advocated by several Postmasters-General. It involves the appropriation of a large sum of money and the transfer of the power from one monopoly to another. The Western Union alleges that the Government originally undertook to manage the telegraph, and then abandoned it and sold out its lines and allowed the Western Union to take up the business. It therefore claims that the Government cannot now resume, except by purchase under the provisions of the act passed in 1866. This act provides for the appointment of appraisers to value the property of the telegraph company whose lines the United States desire to buy, and gives certain rights to companies accepting its provisions. The Western Union accepted these provisions, and thereby agreed to sell its property at an appraisal. The capital of the Western Union is \$80,000,000, its market price at \$80 per share is \$64,000,000, its net earnings are over seven per cent. per annum upon its capital. The Western Union would have a right to demand that their property should not be appraised at less than its selling value, if the stockholders had expended that or any similar sum upon the plant; but, as has been shown, the

public has, since the passage of the act of 1866, contributed more largely to the purchase of the plant than the stockholders, and are, therefore, equitably entitled to share in the benefits if they become the purchasers. Again, it has been urged that the property should be appraised at its cost. We can estimate its cost by the amount expended by the Western Union during the last sixteen years for its lines. This is less than \$60 per mile, or, for the whole equipment, \$22,500,000. This estimate neither includes real estate nor the contracts of the Western Union with the various railroad companies, nor its interest in cables or telephone and other patents, which are probably worth as much or more than its equipment.

I do not believe that Congress would be willing to appropriate \$80,000,000 for the purchase of the lines of the Western Union Telegraph Company, or even to submit the question to arbitration; nor do I think that the people would be willing to give the monopoly to the Post-office Department. The President of the Western Union says, with truth, that "the telegraph is not generally used by the people." Some plan must be devised by which they can use it; and I believe the solution lies in the establishment of a postal telegraph, which, without competing with the business of the Western Union, shall provide a cheap telegraph. According to the last report of the President of the Western Union, the average rate is thirty-eight cents; and, as I have stated above, the average distance of transmission is less than one hundred and fifty miles. This means that the great majority of messages are sent between points not far apart, and therefore the majority are low-rate messages. Although the benefit of the telegraph to the public increases with the distance, less than twenty per cent. of the messages are transmitted more than three hundred miles. The business must be enormous at low rates, and if low rates can be established between remote places, a business nearly as large between them will be created.

Congress could create a postal system, using the present post-offices and delivery system, either constructing its own lines or contracting with parties to furnish all necessary lines for transmitting telegrams, the contractors receiving the rates fixed by Congress in full compensation for constructing, maintaining, and operating the lines, the post-office furnishing such additional facilities as might be required for the purpose of transmitting, at low rates and with greater economy, business

of a less urgent nature than that now sent over the Western Union lines. The Western Union would continue to perform a large part of the commercial business, on account of greater dispatch, and the business of the railroads. It would be inexpedient to adopt a low and uniform rate at once, as it would increase the business beyond the ability of the Postal Department or of any company to handle it. I believe that a uniform night rate of thirty cents between all offices, and a day rate of twenty-five cents between offices east of the Mississippi, and offices west of that river and east of the Rocky Mountains, a like rate between offices west of the Rocky Mountains, and a rate not exceeding fifty cents between any two offices in different sections, would give the people what they need, and make the postal telegraph self-supporting. There are now at least 50,000,000 messages transmitted yearly by existing companies, requiring not less than 150,000 miles of pole lines. In six years, at the ordinary rate of increase, 100,000,000 messages will be transmitted. If a postal system with low rates should be inaugurated, the number would be increased to 150,000,000 messages, which would give business enough for all the lines and employés of the Western Union and the postal system.

Congress should also enact laws regulating the present service, prohibiting stock dividends, and also prohibiting the increase of capital, except for cash, and to the par value of the stock issued; prohibiting consolidations, either by lease or purchase, unless made with the approval of the Postmaster-General, and then at a valuation made by appraisers nominated by the Supreme Judicial Court of the United States. Congress should also give to the press the right to use the telegraph without discrimination in price. It should limit the business of a telegraph company to the transmission of messages, and provide that any telegraph company connecting with another shall have its messages carried over the lines of the other company at pro rata rates and without undue delay. It should provide for full annual returns of the business of the several companies to the Postmaster-General, and limit the dividends to seven per cent. a year on their capital.

Such provisions would compel the Western Union to reduce its rate about six per cent. per annum, which would give low and nearly uniform rates in a very few years.

CAUSES OF FELICITY.

By the hard and fast scientific mode of looking at the phenomena of nature, it might seem at first view that human felicity had no proof of existence. But there are, fortunately, other evidences which give positive proof of it in characters as purely scientific as any in the observation of science. Granting that these are exceptional evidences, they are still proof of the fact. I notice four of these evidences as all-sufficient. In perfect childhood, uncrossed by perverse and chilling influences and blessed by health, felicity exists, not perchance universally, but as a rule. I remember some few pages of my own childhood history, which were filled with an unbounded felicity—a felicity which can be remembered, though it cannot be again realized, or even explained in relation to the precise causes that led to it. I have questioned others on the same point, and, although the response has been much more frequently in the negative than I expected to find it, and although the inquiry has often laid bare a recollection of misery, rather than of felicity in childhood, that could not have been anticipated, it has yielded certainly a balance of evidence on the affirmative side, and this is sufficient to prove the reality of the phenomenon, in at least one stage of life.

There are, again, men and women who pass through life and, by some fortunate heredity of constitution, supplemented by cares of an individual kind, go through long, trying, and eventful careers with perfection of felicity. Joseph Priestley was one of these fortunates. "I was born," he says, "of a happy disposition." And so this man, through a life of struggle and tempest such as few men have known, was ever in felicity. In his child-life he loses his mother. He leaves his home and is domiciled with an aunt, whose gloomy tenets would drive some natures to the deepest melancholy. He passes through severe

changes of thought on solemnest subjects. He becomes a preacher, but, owing to a defect of speech, cannot display an eloquence he knows is in him; and, tossed from pulpit to pulpit, penniless, is forced to teach that he may live. He becomes half friend, half librarian of a nobleman, by whom he is petted at first, and then, with the capriciousness of power, is turned off, as a once-favored dog might be, without a word of explanation. He makes one of the grandest discoveries of the century, and lives to see it accredited to another man to whom he communicated it in the most open manner. Suspected of sympathizing with children of liberty, he becomes, under the vengeance of a vulgar priest, the victim of an ignorant mob, which burns his house and all his precious papers, and he escapes barely with his life. Coming to London, he is obliged to hide from enmity, and (cruellest cut of all) is disowned by and cast out of the learned society whose work he has helped to immortalize. At last, driven in his old age from his native country, he goes to a foreign and distant land, forgiving every one, to die there in perfect peace. Such changes as these, such oppressions through every stage of life, would kill an ordinary man. Yet here was a man who went through every phase of suffering with felicity. His friends, one and all, bear witness to this fact from their objective side. He personally testifies to the same, and explains the reason: "I was born of a happy disposition."

We gather from such instances as these, rare, it is true, but reliable, that in the range of physical life there is a felicity due to heredity; to some combinations of ancestry which, being repeated, would lead to the birth of an almost new race, amongst which Priestley's own desire, "the greatest good for the greatest number," would be the common blessing. For that which has once been born may be born again, and by birth become universal as a progress. If one man can hold felicity in his hand all his life, and in all adversities, why not all men?

There is a third proof of felicity which comes within the knowledge of the majority of mankind, although it is not universal, for I have known a few who have afforded no evidence of it. This proof consists of a sensation felt, I repeat, by most persons, of peace, tranquillity and, in a word, felicity, which often, in consequence of its abruptness and the sharp contrast with what has gone before, is a cause of extreme surprise, so that the event is often recalled and often expected with antici-

pation. In such moments the actual cares of the world sit lightly. The impossible, a short time before, becomes the possible or the easy. Dark forebodings which have pressed almost to despair pass away, and the future is roseate with prospect. There are few who have not experienced this curious change toward felicity. They may say that it is a fleeting change, and that may be true; but the fact is certain and immeasurably instructive. For if felicity can be obtained for one day, for one hour, why not for all days, for all hours.

The flashes of felicity are sometimes startling from their abruptness. They are at other times equally startling from their intensity, and from the relief which they give to the opposite depression with which they stand out in contrast. In speaking of this contrast, and of the advent of felicity after extreme depression, the common explanatory term is singular. Depression is almost invariably described as a physical weight or burthen, and felicity as the removal of a weight, like a physical burthen which has oppressed the body and, in extreme circumstances, has bent it low. "He is bowed down with sorrow" is an expression as true as it is striking. Bunyan seizes on this physical truth. The pilgrim, while yet he is wanting felicity, is troubled with a burthen which weighs upon his back night and day, felicity coming when that burthen falls from his shoulders. The illusionist has here defined what he himself had felt, and hence the force of a description which every man and woman who has read Bunyan has, with very few exceptions, recognized. Felicity is lightness from burthen. The common folk call it lightness of spirit, light-heartedness, being lifted up above the common fate of daily oppression and daily sorrow. The terms define the fact.

When felicity is most absent, this sense of oppression shows itself in other ways which indicate the physical process and suggest the ponderable nature of something that tells on the body and on the mind. In densest states the faculty of memory is often overburthened with details long stored up, which have to be remembered, re-arranged, and reconjectured upon with painful and acutest precision. The thoughts undulate, and great waves seem to overwhelm another organization belonging to the man himself, yet lying afar back and obscured by these rolling tides, dark, dense, material, weighty. With felicity all these waves of deathly pressure pass away. The memory is charged

with no recurring scene of sadness; the calculated difficulties do not appear; the organization which lies in the shade becomes brilliant, and the future is charged with no gloom. These phenomena constitute, both by reality and contrast, what may be called the full-grown subjective proofs of felicity.

Lastly, there are certain objective proofs which lookers-on may observe if they will contemplate others, and which, as independent evidences, are perhaps the most certain. A good perception of character, and, if I may use the term, diagnosis, leads the looker-on to note and know the symptoms of felicity in others; for the symptoms are clear. In the wake of felicity the pulse is regular, tonic, free; the breathing is natural; the eye is bright and clear; the countenance, even in age, is youthful; the appetites are keen, but orderly; the judgment is sound, but joyous; the muscular bearing is firm, coördinate, steady; there is no indication of carrying a load on the back or of oppressive sinking exhaustion.

In the above few passages I have sketched out the phenomena of the felicity we are considering. I have entered into no metaphysical subtleties in definition; I have rested on every-day experience, and having thereby, I trust, afforded the evidence of the state desired, I pass to the thought of how to extend this state—a thought which, according to my view, is eminently practical. To arrive at the idea of the mode of working in this direction, we cannot do better than survey, in the first place, the conditions under which the phenomena of felicity and of its counterpart, depression or infelicity, are manifested.

By a sort of general impression, the weather is believed to exert a peculiar influence for and against the phenomena of felicity. In this view there is some undoubted truth; an increase of the atmospheric pressure and a decrease is each a cause of felicity. In ascending from valleys to moderate heights there is, up to a certain distance, a distinct effect of this kind. So definite is the action that I know of one person who, under some conditions, feels that life is a load too hard to bear, but who, in a dry, bright, mountain region to which resort is often made, throws off the despair altogether and lives a new life. In the nicely adjusted balance of atmospheric pressure against animal circulation of blood, the circulation is relieved by a moderate removal of pressure. But if such removal be too great, if the organs of the body become congested from the removal, as they

may be, the spell is broken. On the other hand, if the pressure be put on to several atmospheres, so that the blood is surcharged with air-gas and the venous blood is made of arterial brightness, the depression of mind is not, at the moment, a marked symptom. It becomes such at certain stages during recovery from the effects of the pressure, not under it in its extreme form. The brightness of mind induced by removal of pressure and freer circulation is, however, subject to other conditions. Dryness must accompany lightness of air to produce the condition favorable to felicity. There may, again, be conditions in which a slight excess of pressure may be conducive to felicity. In the regions where the land is low, compared with the sea level, a slight increase of atmospheric pressure may be advantageous. The air is then usually dry, the wind bracing, and, the vital organs being charged with blood, a condition is obtained which is essentially favorable, in low-lying districts, to the whole of the communities that occupy them.

There are electrical conditions of the atmosphere during which felicity contrasts strongly and strangely with the depression incident to other conditions. My friend, Mr. Hingeston, of Brighton, has very beautifully connected these varying states of atmosphere and these varying states of mind with cloud-land. He sees in the clouds the outward and visible signs of the mental state. The large, white-headed cumuli that collect in clear, bright days are rotary storms of hail, rain, or thunder, gyrating from left to right. Several of these gyrating storms keep marching onward in alternate spaces, marshaled in vast circular array, and rolling around a circumference of bright, translucent calm. On the approach of one of these masses of vapor, the mercury of the barometer first falls and then rises with great rapidity. The accompanying and residual state of the atmosphere is congenial to health. Now the debilitated experience favorable reaction, and the mind is serene and happy. The air in these moments is antagonistic of disease. With the breaking up and dissolving of these large cumuli there is electric action, and most likely explosion, just as the vapor is being condensed into water. The entire atmosphere changes. Everything is dull and gray. The so-called dyspepsia prevails, the acid indigestion of gouty habits, the ills of the scrofulous, indolent, and pitiable host of "never wells." Thus, observes my friend, the sensorial effects of the electrical fluid are proof paramount of its pathological,

physiological energy; and the various forms assumed by the vapors condensing or dissolving in the air—clouds—may be considered not only as picturesque beauties in the landscape, but also as criteria for judging of some of the most potent effects resulting from the operation of an experiment silently and delicately performed upon the functions and sensations of animated beings.

Cold and heat play different parts in the production and reduction of felicity. A dry and sharp cold wave exerts a gentle pressure on the surface of the body, which fills the nervous centers with blood and helps to felicity of mind. A long and piercing, easterly, chilling wind checks circulation, robs heat, and produces even melancholic sadness. A dry, genial warmth acts like a bracing cold. A long warmth, with moisture, checks the vital action and produces a degree of depression which may be as intense as that which is induced by prolonged exposure to cold.

The seasons of the year which are attended with least exhaustion of the body are those which favor felicity. When the exhaustion of the winter and depressing spring months has been removed by the warmth of a genial summer and autumn, the time is most favorable for serenity of mind. On the other hand, the exhaustion of winter and spring induces depression, and is no doubt the cause of that melancholy which renders the months of spring the maximum periods of death by suicide.

Purity of the atmosphere is an unquestionable aid to felicity. The comparison of children living under differing circumstances is sufficient proof of this fact. The children of an open, well-ventilated school-room, how different are they from those who are immured in some of the close, over-packed dens which are called school-rooms. Compare the felicity of the children of the well-to-do who live out-of-doors, and even of the children of the fields and open streets, with that of the children of the small trader, whose back parlor is living-room and play-ground; or the felicity of the man or woman who leads an outdoor life with that of those who live in the close office or work-room.

There are still other agencies which bring, or which check, human felicity, and which are as purely physical in character as those above recorded. There are substances which, taken into the body, produce strange contrasts in respect to felicity and depression. Foods well cooked, foods carefully selected, foods sup-

plied in sufficient quantity to sustain the body equally in all its parts, and so moderate as never to oppress the nervous digestive powers, all conduce to felicity in the most telling manner. Many common foods and drinks affect the system specially. As a rule, all agents which stimulate, that is to say, relax the arterial tension, and so allow the blood a freer course through the organs, for a time promote felicity, but in the reaction leave depression. The alkaloid in tea, theine, has this effect. It causes a short and slight felicity. It causes, in a large number of persons, a long and severe, and even painful, sadness. There are many who never know a day of felicity owing to this one destroying cause. In our poorest districts, amongst the poor women of our industrial populations, our spinning, our stocking-weaving women, the misery incident to their lot is doubled by this one agent.

There is another agent more determinate in its effects and contrasts than tea, and that is wine. I am a total abstainer, but I am an honest observer also; and I confirm, from direct observation, the old saying, that "wine maketh glad the heart of man." If it did this and no more, I should say let the felicity of wine remain to the world. Wine, like the alkaloid in tea, relaxes, lets loose the channels of the blood; gladdens like the ascent by the mountain side; gladdens like the gentle atmospheric pressure which forces more blood on to the internal parts. But, and here, alas! is the rub, carried a little beyond the right mark, the felicity passes into folly, the folly into feebleness, the feebleness into stupor, and the stupor into a depression, the reaction from which is of the bitterest of human sufferings.

The whole of the narcotic series of substances, in the use of which human beings indulge in order to secure felicity, comes under the same condemnation as the two last-named agents. They differ somewhat in mode of action, for they stupefy, and by that means produce a negative condition which is not pleasure, but which may be considered to be an abolition or suspension of misery. This were, to some extent, excusable, if not reasonable, did the quiet end in these negations; but it does not; it is followed by a depression which, less acute, is more prolonged than that which follows the excitement of alcoholic stimulation. Tobacco is one of the narcotic substances which produces the suspension of anxiety, or, as it is said, soothes irritability without stimulation, and, in time, leaves in many persons long depression, coupled with an appetite for renewed indulgence, which

becomes one of the most intense, and, if I may use the expression, most morbid of passions. The confirmed smoker who can stand out against the indirect effects, whose taste for food and whose digestive endurance is not injured, is kept, during the whole time he indulges the habit, in the state of suspension. He does not enjoy felicity, but for the time experiences a relief from infelicity. My own experience, on the whole, is opposed to the indulgence, and I tested it for a long period of my life, as well as observed the effect of it upon others. To the aged it gives, I confess, a negative existence which, when the mind is not filled with choice or refined or cultivated pleasures, makes time less wearisome. To the man who engages in work of great excitement, and of a mental kind, it brings a sense of repose. But, on the whole, it is a bad, and sometimes a fatally bad, indulgence. I have once known a man to die directly from the effects, and how many I have seen injured I cannot say, but a large number. Again, I have seen many much depressed by it, so that I dare not put it forward, at its best, as a promoter of felicity. The world, I must conclude, would be happier if tobacco were unknown or unemployed.

The habitual use of opium for the desire of felicity is of the same erroneous character. The opium smoker, the opium eater, tell us of certain dreams and phantasies which are for a moment felicitous wanderings of the mind. I have visited the opium den to see the effects, and whatever the dream may be subjectively, it presents to the observer no sign of felicity. The expression of the opium smoker is one of restless and intense anxiety. He looks like a man in a dream of misery. His eyes are joyless, his features contorted, his skin pallid or dark, his pulse slow and laboring, his breathing hard and heavy; and when from the half struggling consciousness he wakes to reason, the dream he describes is too confused to be accepted as a dream of felicity. Then he falls into dejection, which deepens and deepens until the desire to return to the cause of the dejection is too overpowering to be resisted. To opium eating and to subcutaneous injection of opium or morphia the same description, with some modification, on which I need not dwell, is perfectly applicable. From the use of such an agent as opium there can be no result of human felicity. There could soon be produced by an extension of the use a madder world than now exists, a more miserable; a happier, never! And this saying,

according to my knowledge, extends to all narcotic substances. There are some, like methylic ether and nitrous oxide gas, which produce infinitely more refined felicity than those I have specifically named, but in the end the results are the same.

I have dwelt thus far on influences of a purely physical kind in their relation to felicity. I have put these influences in contrast, as affecting the state of felicity, and I have touched on some agencies which are used to produce a mock felicity. I must pass from these to a consideration of influences of a different nature, which affect us for or against our happy or felicitous existence. In touching on this side of our subject, the question of hereditary constitution comes prominently into view.

There are some constitutional differences determined by temperaments which are first in importance. Of the four primary temperaments, the sanguine, the nervous, the bilious, the lymphatic, and of their relation to felicity, a volume might be written. I have collected the facts relating to the temperaments of over a thousand persons, and have had collected the temperaments of all the occupants of one of the largest asylums for the insane, in order to determine how the exalted, as distinct from the melancholic, insanities are moved by constitutional stamp of mind. I must not here touch, however, on any detail. I must be content to record as a general fact that, in the earlier days of life, the sanguine is the happier temperament, but not the most sustained; that the dark or bilious is the least happy in early life, but is often, in time, rendered very serene; that the nervous yields a varying condition, full of ups and downs; that the lymphatic is, by a negative effect, the most even; that amongst the twenty-four combinations of temperament the sanguine-lymphatic is the most felicitous on the animal side of man, and the bilious-sanguine and the bilious-lymphatic on the intellectual side; that the nervous-sanguine is the most irritable, and the nervous-lymphatic the most helpless and miserable.

The moral influences and impressions affecting these natures are, from first to last, potent on most of the temperaments and on most of the combinations of temperament. In childhood, the future history of the felicitous or infelicitous after-life is usually written. A few born, like Priestley, of a happy disposition, fight through all adversity, filled with a magic soul of felicity; but these are very few indeed, and are usually of good dispositions.

In childhood they are not affected as others are. In the school-room, as in the play-ground, they are happy. As a rule, the tendency to felicity or its opposite is planted in childhood. The parent, the school-master, the school-mistress, hold the book not of learning simply, but of fate. To the imitative mind of the young, absorbing all that the senses can carry to it and the nervous centers can retain, the character of the presiding mind, ever present with joy or sorrow, justice or injustice, love or hate, cruelty or mercy, as its qualities, is the beginning of the end.

Let me, as bearing on these matters of thought, not diverge from but converge to our present study by a reference to the position of felicity as a physiological quality in life. Of the two natures with which man is endowed, and which by the duality distinguish him from the lower creation,—the pure animal and the pure intellectual natures,—felicity belongs to his animal nature. Felicity and misery are the signs of his still animal character. The intellectuality that would be separable from the animal existence would, if acting of itself, leave the man beyond felicity or its contrary.

Felicity, in short, is not an intellectual faculty at all; it is not seated in the brain. It is not a quality which a man can think himself into, or reason himself into, or directly will himself into. It is, like the beating of his heart and the circulation of his blood, a vital process, going on independently of his volition. He can by rude process destroy it for himself as he can for others. He can kill it for himself as he can stop the motion of his blood by stabbing himself to the heart; but still the quality is so independent of himself that he is often forced to be in felicity by things and acts and circumstances which his reason scorns. "Why does this fool of a book make me happy?" said a hard and suffering and miserable patient once to me as he pitched his "*Pickwick*" to the foot of the bed; "yet it is the only thing that does, while all the time I know that such a set of asses as these *Pickwickians* could never possibly have existed."

By experience of what seems to increase felicity, to lighten misery, to make misery, we often confound felicity and sorrow with intellect. This is merely our own external looking upon external manifestations of internal phenomena, which we know we cannot influence in the same way as we can teach a lesson or convey a fact, but which we strive to control because we think we must do something even for the uncontrollable.

Felicity and its counterpart are not intellectual faculties, neither are they passions, neither have they any direct relationship to physical pain. They are distinct from intellect, passion, physical pain. They are the only true emotions. The man who is destitute altogether of felicity is not of necessity deficient in intellectual power, or destitute of passion, or more or less sensitive to pain than any one else. The most intellectual may be the most miserable; the most silly and inconsequent may be the most blest with felicity. The worst instance of extreme, I may truly say harrowing, misery I ever knew was in one of judicial mind, whose clearness and calmness of judgment was a subject of general admiration, but who had never, he told me, known (notwithstanding his eminent success) in all his life an hour of felicity. The man most replete with felicity I ever knew was one who was endowed with no intellectual supremacy, and who was all through a long life a veritable child.

The center of the emotion of felicity is not in the brain. The center is in the vital nervous system, in the great ganglia of the sympathetic, lying not in the cerebro-spinal canals, but in the great cavities of the body near the stomach and near the heart. We know where the glow which indicates felicity is felt; our poets have described it with perfect truthfulness as in the breast; it comes as a fire kindling there. No living being ever felt happy in the head; everybody who has been happy has felt it from within the body. We know again where the depression of misery is located. Our physicians of all time have defined that, and have named the disease of misery after its local seat. The man who is ever miserable is a "hypochondriac." His affection is below the ribs. No man ever felt misery in the head. Every man who has felt misery knows that it springs from the body; speaks of it as an exhaustive sinking there. He is broken-hearted; he is failing at the center of life; he is bent down because of the central failure, and his shoulders, too heavy to be borne, feel as if oppressed by an added weight or burthen, under which he bends, as if all the cares of the world were upon him to bear him down.

To return. There are numerous influences which in an indirect way tell upon felicity, for it or against it, as distinctly as those grosser agencies mentioned in the earlier part of this essay. To these I would now invite attention. The influences to which I am about to refer are in reality purely physical in

their action, although they are commonly known as habitual, sensational, moral, or mental influences.

I notice, in the first place, that felicity is always favored by sufficiency of rest and sleep. But sleepers know no felicity; yet they who sleep in childhood and old age ten hours, in adolescence nine, and in middle active age eight hours soundly out of the twenty-four, are mostly well favored with the blessing. They may be exposed to causes which are opposed to felicity, but even then the causes are feebler in action than they otherwise would be. I put sleep in the first place as an aid to felicity because it is the first. I have no knowledge of any instance in which a person who slept well was altogether devoid of felicity. The beneficent action of sleep in regard to felicity is, however, indirect. It is due to the physical and mental strength which it confers on those it favors.

Strength of body secures felicity. Persons comparatively weak of mind may, with a good physique, be happy; but very few who are weak of body have any long tastes of felicity. We may take it all around that the feeble of all ages are unhappy. It is a matter of common observation that persons who are so unfortunate as to be born deformed of body, though the defect be concealed or hidden, are not blessed with felicity. It is not the fact of the deformity which causes the infelicity, for that may be concealed; it is the bad health as the rooted cause of the defect which tells. Let the defect be from accident happening to a person born of good stamina and shape, and his felicity, despite the acquired defect, may be the same as in others; let it be inbred, then it is the cause of infelicity. Any sign of inherited weakness is an equal sign of absent felicity, though it be no marked physical defect. Cardanus observed, with much acuteness, that persons who from early life showed very large and prominent veins, and thereby a languid circulation of the blood, are never happy, while those of well-knit body are. The observation is perfect. We physicians know that a sluggish circulation is incompatible with felicity, and that they who show this indication, by such local diseases as hæmorrhoids, for example, are amongst the most depressed of the many who consult us. We say of these that they suffer from arrested circulation through the liver, and doubtless such arrest is depressing; but the arrest means physical exhaustion, and physical exhaustion is the root of the evil. When the circulation is sluggish the liver

is sluggish and the brain is sluggish, and the nervous centers are depressed. In a sentence, whatever prevents physical exhaustion and sustains physical strength sustains felicity, while unhappiness follows the feeble body as the shadow follows the substance.

When the sun of life is high,
All is bright;
When the sun of life is low,
All is night.
Thus we laugh, and thus we sigh,
Light and shade where'er we go.

Physical work, when it is carried to an extent short of exhaustion, keeps up felicity, and sloth destroys it. But the physical work that exhausts kills felicity. The argument extends equally to mental work. Moderate, wholesome, mental work is the best of all aids to felicity next to sleep; it strengthens the mind, it softens grief, and soothes care. Carried to excess it is pernicious, and destroys all felicity. Cowper, the poet, was wont to say that no labor is so wearing as composition, and few men possibly have felt more unhappiness as the result of mental exhaustion than he. But his is the fate of all who force the poorly nourished brain to daily or nightly repeated weariness.

The influences derivable from sleep and bodily power are purely physical influences, but there are others called sensational which, through the physical nature, have a potent effect for or against felicity. The sense of hearing has the most intimate connection with the vital or animal nervous system. The auditory nerve, as Dr. Bucke has shown, possesses many of the characteristics of an organic or sympathetic nerve, and we all know how many external vibrations which reach the ear affect the digestive system, produce appetite for food and a feeling of felicity; or, on the other hand, set the teeth on edge, destroy appetite, and give rise to gloom. Thus things told affect quickly, often permanently, for good or bad. By the sense of sight we are affected also in regard to felicity, but less intensely, and after a different manner. Sights gladden or dazzle or pall or sicken.

Not to extend an argument which admits of any degree of extension, the senses, as doors and windows through which impressions vibrate into the animal organization, can scarcely be touched by external phenomena without exerting some influence

that shall make or disturb or prevent felicity. When they convey beauty in sound or picture; when they convey variety; when they convey cheerfulness of act and manner and voice and feeling; when they convey to the soul the picture or story of generosity, of courage, of purity of life and character, of prosperity,—then they convey felicity which, passing through the brain on its way, finds its seat in the vital centers near the heart, within the body.

I have striven so far to indicate what may be called the physiological bearings of the subject. I have endeavored to show that felicity is something that is of hereditary quality; that it is something that is made or not made by external agencies over which we have little control; that it is something which is made or not made by many agencies which we have directly under our control. In these respects felicity stands precisely in the same position as health, in the widest sense means health, and is another word for health. Health, like felicity, is born, is made and unmade by external agencies which as yet are out of human control. Health also, like felicity, is made and unmade by numerous influences which are under human control. Health resembles felicity also in that it depends on the good working of the animal or organic systems of life. I could, if this were the occasion, enter here into one of the most absorbing of questions touching the connection existing between the lower and the higher human nature. I could indicate how the lower and higher nervous centers, charged during life with a subtle, ethereal medium, communicate with each other and with the outer universe, and how on the conditions of this refined intercommunicating bond or sphere both health and felicity are moved by external pressures, by external vibrations, by external agents taken into the living system, and by products generated within the organism and diffused through its nervous atmosphere. But I leave this inviting subject for a more immediately practical one.

Over those atmospherical causes of felicity which have been noticed we can exercise, as yet, no direct action. At the same time, just as we can divert the lightning from its fatal course, we can indirectly effect good. It is unpardonable folly to erect human habitations in dank and humid spots, below the sea level, or in dry and arid spots where the labor to obtain the necessities of life doubles their cost. In Africa, at this moment, the seed of new life that is being sown will largely be seed of felicity or

sorrow, according to the selection of the sites on which the new and great centers of life are constructed. Nay, in this direction, man may divert the operations of nature herself. He may change the courses of nature as he cuts down her forests or plants new forests, or alters the lines of rivers or makes new lines, or fills up valleys or lowers or raises mountains, or connects or disconnects oceans. With the mastery of the surface of the planet in his power, man may, in fact, make what regions he pleases for good or for evil. The earth is the freehold of the sons of men.

If the natural air which man makes not and invented not may, under correct teaching, be to a large extent utilized for felicity, how much more easy is it to remove the unnatural conditions of the air which we ourselves make, so that fullest advantage of what is provided for good may be taken. We shut up our young in closest rooms of close towns; we shut up our men and women by the millions in close shops and factories; some one million of us in Great Britain who call ourselves, with ignorant irony, the ruling classes, shut up some twenty-five millions of the people, with their wives and children, in walled-up atmospheres, where atmospheric purity is unknown; where cold and heat oppress; where food is what can be got; where drink is what can supply a false felicity for a certain sorrow; where marriage reëstablishes misery; where good sleep is impossible; where physical strength is so impaired that a perfect body is not to be found; where exhaustion from work is the daily cross; where things and objects of beauty are rare as angels' visits; where, in the selfish race to barely live, generosity is impossible; where, in compressed homes, purity of life is a problem the purest can hardly solve; where variety is replaced by the dead monotony of unchanging sounds for the ear to hear, unchanging scenes for the eye to see; where fear dominates over courage; where hope has no chance; where prosperity is so little known that the worn-out life has no expectation this side the grave; and where death is so busy that three die to one in more favored communities. We, one million, I repeat, shut up our twenty-five millions under these conditions, and wonder why those millions know nothing of felicity; why they are peevish, reckless, melancholy — sometimes drunken, sometimes rebellious, and ready to run after any leader who shall promise to lead them into some happier sphere,

however little removed from that in which they are. Wonder ! The wonder is how human nature can bear such a famine of felicity and live as if it only lived to die.

The sanitarian should, I think, begin to study the psychological side of progress—what human nature can and cannot bear ; how much pressure can safely be put on humanity without danger of explosion ; how much felicity can be secured by removing danger ; what effect food exercises over the peace of man and men ; what effect clothing, diminished work, and innocent recreation exercise ; what agents drive men mad, and how such agents should be removed or replaced ; what habitations do for the human species for good or evil. These are all sanitary questions, and they all bear on felicity.

It has been shown that some exceptional men are born of a happy disposition, and it might have been shown, on the clearest evidence, that multitudes are born of an unhappy, nay, miserable disposition. Sanitary science can discover which are the lines of heredity for the happy and for the unhappy disposition. We could, with this discovery in our hand, impress on the people, with certainty of being listened to and attended to, that marriages ought neither to be matters of chance nor matters of mere monetary convenience, nor indeed matters of mere insane so-called love ; but that the marriage tie, extending its influence into the future, should be no bond and seal of diseased heredities, but the bond and seal of a healthier and happier racial progress in every succeeding generation.

BENJAMIN WARD RICHARDSON.

EVILS OF THE SUB-TREASURY SYSTEM.

FIFTY years ago the mention of government deposits would probably have thrown every household into heated controversy; but to-day it is doubtful whether many persons, outside of those who have dealings with the banks, even know where or how the surplus balances of the United States are kept. And yet this question is of more financial importance now than ever before.

The first United States Bank was used as a depository, but in 1816, in the second United States Bank charter, the first legislation was enacted making this institution a depository. Before that time, and after 1833, when Jackson removed the public funds, the various State banks were also used. The crisis of 1814, as well as that of 1837, brought ruin to the State banks and consequent loss to the Treasury as their chief depositor. How the question got into politics in Jackson's day is a matter of history known to all. Finally, a divorce of banks and state was effected in 1840, but repealed in 1841; then in the years when public attention was drawn to Texas and the Mexican war, the Independent Treasury act was reenacted, in 1846, and has since remained in force.* The system, as created in 1846, has been since but slightly modified, and then not until the exigencies of the first war loan, in 1861, brought about a change by which deposits could again be placed in certain State banks. It will be remembered that only institutions chartered

* Act August 6, 1846. Sections 1, 2, 3, and 4 (and subsequent acts) established as the Treasury the rooms in the new Treasury building at Washington and the rooms and vaults in various places of deposit. Sec. 6: "That the Treasurer of the United States . . . and all public officers of whatsoever character be and they are hereby required to keep safely, without loaning, using, depositing in banks, . . . all the public money collected by them . . . till the same is ordered . . . to be transferred or paid out." Sections 18 and 19 provided that after January 1, 1847, all sums due to, or disbursed by, the United States should be paid in gold or silver coin, or treasury notes.

under the various State laws, and so known as "State banks," existed from 1837 to 1864. The commercial depression which followed Lincoln's election and the secession of the Southern States left business in an unsettled condition and obliged the banks to use every means to retain specie in their reserves. The first loan act of July, 1861, proposed the sale of long bonds, running for twenty years (the "sixes of 1881"); but the public were not in a position to take them rapidly, and sales were unfortunately slow. Very patriotically, the banks of New York, Boston, and Philadelphia subscribed for \$150,000,000 of these bonds, provided the Treasury would not require coin of them. If, under the terms of the act of 1846, they must make payment in gold or silver, it would be impossible to take the bonds; consequently, it was arranged so that the coin which the banks would otherwise pay for the bonds should be left by the Government with the banks in the shape of deposits,* in the expectation that the public would absorb the bonds offered for sale and that proceeds from these sales would come in as fast as the Government would probably draw on its coin deposits. This was the explanation of the change in the Sub-Treasury system made in 1861.

Only one other change took place, and that consequent on the organization of the national banks in 1864; but it indicates a very considerable departure from the policy of 1846, which demanded a total separation of the Treasury from the banks. In fact, the establishment of the national banking system, by which the Government authorizes and oversees the issues of notes, stands forth in marked contrast with the legislation of 1846, by which the Treasury was withdrawn entirely from any connection with the banks or the money market. The act of June 3, 1864, put it within the power of the Secretary of the Treasury to designate certain of the national banks as depositaries of public funds. But this law, in force to-day, makes a curious distinction between different kinds of Government moneys: it forbids that "receipts from customs" should go into

* Act August 5, 1861: Sec. 6.—"And be it further enacted, that the provisions of the act . . . passed August six, eighteen hundred and forty-six, be and the same are hereby suspended, so far as to allow the Secretary of the Treasury to deposit any of the moneys obtained on any of the loans now authorized by law, to the credit of the Treasurer of the United States, in such solvent specie-paying banks as he may select." . . .

any national bank depositary; but, at the same time, permits these institutions to receive from collectors any other dues to the United States, such as internal revenues, and after giving proper security hold them on deposit.* As if one kind of state money was good and could be trusted away from home, and another kind was bad and could not.

Such being, in brief, the history of this part of our fiscal system, when it is proposed to study its operations within the last few years, some very striking evidences of growth are to be found. In the days when the debt was insignificant, and the operations of the Treasury comparatively small, the withdrawal of Government funds from the money market produced no difficulties; but, with the extension of fiscal movements from small sums to hundreds of millions, the present policy of the Government, taken in connection with modern banking methods, becomes one of vast practical importance.

The chief objection to the independent treasury system of to-day is that it has been outgrown by the country; that it is economically wasteful in proportion to the magnitude of its dealings; and that, by its effects on the reserves of the banks, it is becoming dangerous to the banking and business public. In order to show this, it will be necessary to explain, as briefly as possible, some of the operations which go on in the banks. A might be a borrower at a bank. The resources-side of the account shows an increase of loans by the amount of the securities received to secure the loans; but if checks on the bank are more convenient, and are received by every one to whom he makes payment, what need has A of actual money for his loan? He is, therefore, at once credited with a deposit to the amount of his loan, or, in fact, borrows the right to draw a check on a deposit placed to his credit. Then the disposition

* SEC. 45. "And be it further enacted, that all associations under this act, when designated for that purpose by the Secretary of the Treasury, shall be depositaries of public money, except receipts from customs, under such regulations as may be prescribed by the Secretary. . . . And the Secretary of the Treasury shall require of the associations thus designated satisfactory security, by the deposit of United States bonds and otherwise, for the safe-keeping and prompt payment of the public money deposited with them. . . . Provided, that every association which shall be selected . . . shall take and receive at par all of the national currency bills, by whatever association issued, which have been paid in to the Government for internal revenue or for loans or stocks."

to draw actual cash depends on considerations which do not affect our inquiry, such as the soundness of the institution, or a general disturbance of credit. It will be seen, then, that in nearly exact proportion to the use of checks and deposits in a community will there be a close relation between loans and deposits. To make it absolutely clear that in great financial centers this system of checks is really in use, the following figures are taken from national bank receipts in the United States on one given day, June 30, 1881:

<i>Location.</i>	<i>No. of Banks.</i>	<i>Total Receipts.</i>	<i>Proportions of</i>			
			<i>Gold Coin.</i>	<i>Silver Coin.</i>	<i>Paper Currency.</i>	<i>Checks, Drafts, etc.</i>
			%	%	%	%
New York City.....	48	167,437,759	0.27	0.01	1.02	98.70
Other Reserve cities..	187	77,100,715	0.76	0.15	4.71	94.38
Country banks.....	1731	40,175,542	2.04	0.77	15.47	81.72
United States.....	1966	284,714,016	0.65	0.16	4.06	95.13

This shows that ninety-five per cent. of all transactions with the national banks of the United States are effected without the use of actual cash. To this extraordinary extent have credit devices succeeded in bringing us to a civilized method of barter, by which goods are actually exchanged against each other without the transfer of money.* In country districts, however, this is less true. Still, this highly sensitive mechanism is the product of the last few decades, and is wholly the outgrowth of modern credit and business. The increase between 1871 and 1881 is very striking, as seen in the operations of the national banks:

	1871.	1881.
Capital	\$458,000,000	\$464,000,000
Deposits	631,000,000	1,083,000,000
Circulation	317,000,000	320,000,000

While "capital" and "circulation" remained very nearly stationary, credit liabilities, or "deposits," increased about seventy per cent. and saved the actual use of money to that amount.

* The same truths are illustrated by returns on a given day from London and provincial banks in England.

The connection of this with the Treasury will soon be evident. Recall (1) that an increase of loans increases deposits, or demand liabilities, and (2) that the means by which demand liabilities are met consists of the cash reserve. Yet, in the mere act of making a loan, nothing has taken place which increases the cash reserve. Moreover, the ability to loan depends on the relation of the cash reserve to the immediate liabilities, that is, practically, to the deposits.

Anything, therefore, which changes the amount of the cash reserve vitally affects the loaning power of all the banks. But it so happens that the national banks are obliged by law to keep either coin or legal tender notes in their reserves; therefore, our inquiry need only follow the movements of coin or greenbacks. At a given time, the amount of cash in the community is a definite quantity, and the conditions of business and exchange determine how much is to be left in the banks. When trade is going on regularly, it has, *ipso facto*, reached a settlement of those relations in accordance with commercial needs. After the adjustment has been made, if there is a greater demand for loans than the banks of one city can supply, the higher rate of interest there attracts deposits from other places or, *mutatis mutandis*, from other countries. Whenever gold is drawn from New York to London, the banks are touched at a vital point. Certain business houses wish to pay gold to persons in London, and so draw on their deposit accounts in the banks for the amount of the intended shipment, thereby lessening the cash reserves to the same amount but in a far greater proportion,—since a given sum is a larger percentage of the smaller of two quantities. Then, if the banks cannot replenish their stock, eventually they must do one very hazardous thing—a resource tried only in a last extremity—refuse to loan. But that means commercial distress in every branch of business, a rich crop of failures, and the old story of a panic. This, as explained, is what happens when gold goes abroad. But this also is what happens when gold is withdrawn from the banks in any other way. Suddenly carry the gold to London; sink it in the sea; or hide it from sight in the vaults of an independent treasury, and the effects on business will be precisely the same. Here, then, is the sin of the Sub-Treasury system against the business interests of the country. To begin with, the revenues of the United States are coming in faster than they can be

applied to the expenses of the Government and the payment of the national debt. The tariff is still practically on a war basis, and is giving us war revenues in times of peace. The customs show, consequently, the greatest increase, and, in fact, within the last four years they have nearly doubled.* Then it is also to be remembered that, during the war and the depreciation of government paper, because the country had agreed to pay the interest (and, later, the principal) of its debt in coin, it was found necessary to secure a regular supply of specie. So it was required by law that no other money than coin should be received for duties on imported goods. Consequently, as the amount of these duties increases, there will always be an increased demand from importing houses for specie with which to pay the Treasury. But this coin is got in the same way as when shipments are made to Europe: these houses draw on their deposits for the money and take it from the reserves of the banks. Then the captive specie mournfully descends into the dark vaults of the Government sub-treasuries. There is no difference, except in the incident of destination, between this operation and sending it over the ocean. This wrong, as mentioned before, is accomplished by the act of June 3, 1864, which forbids the deposit in the designated banks of any sums which are received in payment of customs. The measure was adopted when greenbacks were below par, and consequently has no justification in the present changed conditions of the currency.

But why does the coin not come out of the Treasury, after it goes in? The Secretary can pay out funds only on appropriations of Congress for certain purposes, such as for pensions, for interest on the public debt, or for the principal of such obligations as have matured. In case the expenditures were met in exact proportion to the incoming flow of specie, the funds would go back to the banks. But from the very nature of Treasury payments this cannot be true. In calling in matured bonds it is necessary to give three months' notice before interest ceases,

* Sums are given in millions and tenths of millions.

Year.	Dutiable Mdse. Imported.	Customs Received.	Internal Revenue.	Reduction of Debt.
1879.....	\$296.7	\$137.2	\$113.9	6.8
1880.....	419.5	186.5	124.5	65.8
1881.....	448.0	198.1	135.8	100.0
1882.....	514.0	220.4	146.5	166.2

so that the Secretary is obliged to forecast with precision three months ahead, and be certain that his surplus is sufficient for the call. Hence, even if the called bonds all came in when interest ceased, the specie must remain for a considerable time out of reach in the Government vaults. But, in point of fact, it is found that a considerable proportion of the bonds are not sent in when called and, therefore, specie to the full amount of the call cannot be sent forth. Payments for interest, or pensions, moreover, are at still longer intervals than those for matured bonds. But every day and week coin is withdrawn from reserves by importers to be turned over to the Government for customs duties, while the gates of the Treasury are only opened at considerable intervals. The bad effects are felt daily; the relief comes, perhaps, monthly or at longer periods. To show with what rapid and very exasperating jerks the system has worked, a table and a chart have been prepared which illustrate the actual operations for the last six months of 1882:

1882.		<i>Specie withdrawn by Sub-Treasury.</i>	<i>Specie let out by Sub-Treasury.</i>
Week ending			
July	1	\$3,500,000	.....
"	8 .....	.....	\$10,900,000
"	15 .....	.....	300,000
"	22	900,000	.....
"	29	2,500,000	.....
August	5 .....	.....	3,100,000
"	12 .....	.....	2,300,000
"	19	2,000,000	.....
"	26	1,800,000	.....
Sept.	2	3,700,000	.....
"	9 .....	.....	1,400,000
"	16 .....	.....	1,800,000
"	23	1,400,000	.....
"	30 .....	.....	30,000
October	7 .....	.....	300,000
"	14	4,800,000	.....
"	21 .....	.....	1,900,000
"	28	1,500,000	.....
Nov.	4	200,000	.....
"	11	700,000	.....
"	18 .....	.....	3,000,000
"	25 .....	.....	2,400,000
Dec.	2 .....	.....	3,000,000
"	9 .....	.....	2,000,000
"	16 .....	.....	5,800,000
"	23 .....	.....	2,100,000



The movement of the line above 0 shows the flow of specie from the reserves of the banks into the Treasury and, below 0, the flow out of the Treasury back to the banks.

Moreover, since the return of specie from the Treasury is awaited with anxiety, all things depend on the intentions of the Secretary. The extent to which the finance minister of this country holds it in his power to ruin or extend credit is already a dangerous thing to contemplate. He is master of the monetary

situation. The irregular jerkings of the Treasury movements add fuel to speculation. If much specie has gone into the Treasury, speculators can withdraw more, and "squeeze the market." It is, therefore, possible for the Secretary to affect the money market, and thereby the fortunes of men, throughout the whole country. It is a power which ought never to be given to any man; and yet it is the highest evidence of the integrity and character of this official that he has never been suspected of such action, and that this argument against the present system is, of all, the least important.

The administration of our Treasury balances has great and serious defects. At present, it acts like a highway robber who shuts his fingers tightly around a man's throat until breathing is cut off, and then lets go until the victim has recovered sufficiently to give the ruffian the pleasure of repeating the process. He would be a very mild-tempered man, indeed, who simply arose and went on his way, remarking that such treatment is occasionally very inconvenient. The nature of the evil, however, does not seem to be clearly understood, for we are told that a reason for reducing taxation is the difficulty under which the Treasury labors of releasing its surplus funds. By this theory, the matter is to be settled, not by studying an improved system of fiscal administration, but by avoiding the issue through a removal of the special and temporary cause of the difficulty. This is not high statesmanship, but it is the position of our present Secretary of the Treasury in his report of December, 1882 (p. xxviii). After discussing the question, he says: "For these reasons I would not seek a release of the Treasury from this complication, in these modes [*i. e.*, by depositing in banks]. The radical cure for the evil is in the reduction of taxation. . . . The evil comes from the likelihood of the Government holding from time to time a large surplus to be poured out in volume at uncertain and unforeseen times, and at times often inopportune for the business of the country. There could not be that surplus . . . if the subjects of taxation were lessened."

The principle of this policy is exactly that of an employer who, once finding a clerk in the act of stealing money from his safe, good-naturedly refused to discharge him; but adopted the ingenious plan of reducing the extent of his business in order that no surplus might be left in his safe as a temptation to a poor fellow who was a trifle weak in his character. Common sense would suggest that this temporary expedient for freeing

the thief from temptation was dearly bought at the expense of reducing the volume of the employer's transactions, especially when he was heavily in debt and wanted to clear himself from this burden in a prosperous season. Surely this reasoning of the Secretary is most extraordinary. Taxation is supposed to be levied in proportion to the expenditures of the state, and not raised or lowered on account of the difficulties in fiscal administration by which the money is received or paid out.

The present Sub-Treasury system, moreover, is bad for another reason, founded wholly on fact. In May and June, 1881, about six hundred millions of five per cent. and six per cent. bonds fell due, and were extended at three and one-half per cent., on condition that they might be paid off whenever the revenues gave a surplus. And they have been rapidly paid; indeed, it is owing to the possibility of paying them off that the Secretary has been able to let out specie from his vaults in such amounts as have greatly lessened the evils of the present system. The ordinary payments for interest alone would have released but a fraction of the stream of specie daily flowing into the "bourne" from which no traveling specie ever easily returns. Had no payments been made for bonds, there would have been an increased pressure put upon the bank reserves. It would have been like a continued stoppage of the breath; strangulation would have taken place in the financial organism; and if no help had come from abroad, or elsewhere, we should soon have had a body without breath, a financial corpse, *i. e.*, a panic. But, if this would have happened had there been no bonds to be paid off in these last months, it is exactly what will happen in the near future, unless some change is made. If our present surplus continues, it is estimated that by June, 1886, all the bonds redeemable at the pleasure of the Government will have been paid. Then what? No other bonds, unfortunately, become due until 1891; so that in less than three years we ought not, forsooth, to have a surplus from revenues, because the specie will be withdrawn from business. In two or three years, then, the Sub-Treasury system will be as troublesome as ever, even if taxation is reduced. Or, to return to our illustration, the dishonest clerk will begin to filch again, if he is retained in his position.

Thus, as fully as the limits of this paper would permit, the history of the present system, its workings, and the evils attaching to it have been given, and it may well be asked now what

remedy is proposed? It is easy to destroy, not so easy to construct. In taking up this part of the question, it must be asked, first, what has financial experience in other countries to teach us? France keeps her balances in the Bank of France, and rather aims to correct than to interfere with the money market. England has no treasury, but collects and disburses all her funds through the Bank of England, without taking one shilling from the borrowing public. We have, it is true, no Bank of France or Bank of England, but we have in the national bank system the best the country ever enjoyed. By the act of 1864,* they are made possible depositaries, and are now used as such for that part of the Government revenues which is collected by internal taxation. The machinery for a reform, therefore, is already in existence, and suggested by the act of 1864. Yet the question of a remedy is to be settled, as in the case of a disease, by the explanation of the evils. It is not generally realized that, like the Bank of England, the Clearing House Association of New York is the center and pivot of the banking system of the country. The country and city banks keep a large part of their reserves in the New York banks, and, as every banker knows, this fact makes the latter the heart of the whole system; and naturally, too, for New York is the place where the largest exchanges of goods take place and where credits and loans are most demanded. To the condition of the reserves in the banks of New York every one now, as a fact, looks when it is desirable to mark the effect of shipments of specie abroad, or of withdrawals by the Treasury. Consequently, these banks must be parties to any arrangement by which the evils of such withdrawals may be avoided. It is the reserves of the New York banks which must be protected from sudden drains. They are, therefore, by the very facts of trade and banking in this country, marked out as the proper agents of the Government in the proposed fiscal reform. But, say objectors, the security of the Government funds becomes involved in that of these banks, and, in case of a commercial crisis, the Treasury would be unable to get at its funds and could not meet its daily demands. That this happened in the years after the panic of 1837-9, before the passage of the Sub-Treasury act, is true. Therefore, let the Government, if it should deposit with these banks, exact a security,—and for the present it would be

* *Vide* note, page 554.

best to have this in the shape of its own obligations or bonds. It does this already in regard to internal revenue. And then there is nothing to prevent the Government from keeping a little sum in its own vaults as provision against a rainy day. But its own bonds would furnish an absolute security, because, in this case, they are the very obligations for the payment of which the surplus funds are collected by taxation and deposited in the banks.

There is actually no reason in using the fear of a panic against a system of deposit with the banks. As a matter of fact, it is proposed to set apart a special part of the bank resources as a pledge for the payment of that one liability known as "Government deposits." But this is exactly what has been done in the case of issues by the national banks, and it need hardly be asked whether one cent has ever been lost by holding a note of these institutions in the crisis of 1873. No one ever did lose; and there is less reason that the Government should ever lose by the proposed plan. But would the banks take these deposits? Yes, readily, and even pay one or two per cent. interest, a sum which would be a clear gain to the Government, because as long as the specie remains in its own vaults it returns absolutely nothing. The holding of Government balances is, as every banker knows, a most valuable privilege,—simply because, under the modern system of credit, banks derive their chief income from the ability to loan the money left with them on deposit. In the case of funds intrusted to them by private persons, they are enabled, as experience shows, to loan perhaps two-thirds, and yet have in the remaining one-third a reserve sufficient to meet daily demands from these depositors; but in the case of Government deposits, not only are the amounts large, but bankers can know, through the publicity given to Treasury operations, exactly when sums fall due and how long the money is to be left with them. Consequently, the element of uncertainty existing in regard to private deposits is reduced to a minimum, and a larger proportion of public deposits can be loaned. But the argument for the change ought not to be based on the small profit either to the banks or to the Government, but on the necessities arising from the condition of modern trade, and the connection of the Treasury operations with the money market. Even if it cost the Government something, it would yet be desirable.

It is true that, if a security of United States bonds is adopted, the plan cannot be any more permanent than the system by which national bank issues are secured. But the suggestion affects the Sub-Treasury operations differently from the way in which it affects the issues of national banks. When the United States bonds are paid off and disappear, other securities must be devised for the note issues, or the national banks must cease to exist; but in the case of security for deposits of Government funds, when our bonds are paid, there will be no reason for the existence of Government deposits to any extent, since there ought to be no surplus to deposit. The Federal Government has no right to collect more than it expends just for the fun of it, or for the silly purpose of dividing it among the States.

J. LAURENCE LAUGHLIN.

THE DAY OF JUDGMENT.

PART I.

THE way of man is mechanical ; the way of God is spiritual. The way of man is to stand outside and do things ; the way of God is to brood within and make things do themselves. To them of old time was revealed a great truth which science could not discover, which to-day she sadly admits is beyond her ken : that man has a divine origin and an immortal nature. But the human record of that revelation is infantine in its simplicity. God formed man of the dust of the ground and breathed into his nostrils the breath of life. That is the way a man would make man !

To the oldest world, for the consolation and succor of all the generations, came the assurance of final justice. Persecution, malice, misery reign in the life that now is. Justice is not secured, is at most only clutched at. But this life is merely a short stage. In the life to come, truth shall prevail and every man shall receive according to his works. In the strength of this promise, humanity has been able to support its accumulated woe.

But the men to whom this sufficient assurance was intrusted could not receive it without picturing in their imagination how it should be accomplished, could not imagine how it should be accomplished except in the human way. Man's way of securing justice is through visible machinery—lawyers, judge, audience, sheriff, scaffold. Immediately, the primeval man wraps his god-given idea in man-made garb, and the heavens pass away with a great noise, the elements melt with fervent heat, and the Lord Jesus appears in the skies with mighty angels in flaming fire, taking vengeance on the evil-doer. Thus would man conduct a world to justice.

But to this human way rise instantly human objections. What tribunal of eternity could confront the infinite trivialities of time? This would be to make eternal justice an eternal bore. All the court-room machinery is man's inevitable but clumsy device. The assizes of God are silent. His judgments execute themselves.

"His thunderbolts have eyes to see
Their way home to the mark."

There is no set time, no appointed place. His handwriting is on every wall. His day of judgment dawns with each sunrise; sometimes we see it, sometimes we are blind. For every man, his day of judgment comes when his vision is cleared to behold himself in the divine light. As we are social beings, to society must come also at some period his vindication or his inculcation.

Never has the divine method of administering justice been more signally illustrated than in the story of Thomas Carlyle. He began life and closed it with a remarkable absorption in himself. So powerful was his self-love that it embraced his family and conferred dignity and worth upon all who were of his blood; while most persons not akin to himself he despised and rejected. He believed his opinions so important as not only to warrant but demand for their promulgation a sacrifice of the amenities and obligations of life outside of his family circle. He fought a long and bitter fight, and he conquered. The world at first ignored him, then ridiculed him, finally yielded and took him at his own valuation. Long before his death he was the "Sage of Chelsea," and a prophet with great honor in his own country.

But God is the only public opinion. The day of judgment came; came to Carlyle before he had gone from the world; came to the world while yet his name was at its brightest. There was no court, no arena, no array of criminal or scenic display before men and angels. All through his life, unknown to himself, without sound of trumpet or scratch of pen or intent of heart, his history was writing itself, his condemnation was silently keeping pace with his sin. By his side moved always a slight figure, the figure of a woman whom he loved, despised, trampled upon, lamented with unavailing tears: a woman who loved him, revered him, immolated herself to him, recorded him. Nothing was further from her thought than to judge him; but through

her he is judged. The heart that held him highest brought him lowest.

Many have sought to break his fall — in vain. We may quarrel with Froude, but the question is not now Froude's day of judgment; it is Carlyle's. It is not a mere literary judgment that is to be passed. Carlyle is a prophet of life. He was a teacher of men. He believed himself Divinely commissioned. He proclaimed the gospel of common things. He enunciated principles for human practice. He launched invectives against stranger and friend for ignorance of what he knew, for indifference to what he preached. We have a right to judge him by his works. A singular, an appalling fate has given us such an opportunity to judge as the centuries seldom offer. We know the Carlyles as we know few of our neighbors. A ray of light has cloven their house in twain, and the world beholds a philosopher reviling his generation with his lips and despoiling his home with his life; nursing his own genius with unsparing vigor, repressing his wife's genius with unrelenting rigor. Regarding the movement of such a mind as Carlyle's, no incident is trivial. Few greater themes can engage human attention than the development of so extraordinary a nature. No floating moat in the sunbeam is too minute when the central figure is Carlyle's.

For our purposes, his story begins with a dainty, dancing child, sprung from a gentle family, of bright intelligence and sterling principle; growing to win all hearts, alert with the noblest ambition, instinct with the finest character. To this daughter of the gods came a son of the gods, superb and splendid. That he was worthy of her, he showed by his unflinching resolve to do without her. Yet how pitiful, how sordid was the barrier between them; how stupid the society that erected it! By the very simplicity and unconsciousness of his great nature, Edward Irving fell an easy prey to a vulgar family. When his sleeping heart thrilled with waking life under the penetrating brilliance of Jeannie Welsh, and all his being moved irresistibly to her, he suddenly found himself enmeshed in a wearisome but fatal entanglement which claimed to be an "engagement," which neither dared he break, nor did his true love permit him to break, since the miserable woman who had ensnared him held him. It is sixty years ago, and the heartache of it is as heavy and hopeless to-day as on the sad morning when he turned away from what seemed

to him paradise, because his love was in it, to die of his broken heart. Alas! that there was no one to speak with authority to these two young, loving, bewildered souls, and declare that there is no valid engagement but marriage. An "engagement" is made but to be sundered. Its very purpose is to be broken if need appear. An "engagement" is but a trial trip before setting out on the unreturning voyage. So far from being binding, it should yield to a word, to a wish, to a misgiving. Marriage alone is insoluble; and by as much as morality and religion, delicacy and decency, the stability and the dignity of human society declare that marriage should be insoluble, by so much should every arrangement that precedes marriage be as slight and soluble as the most timorous heart could demand.

No one could speak better than Jane Welsh herself spoke, but too late:

"A positive engagement to marry a certain person at a certain time I have always considered the most ridiculous thing on earth. It is either altogether useless or altogether miserable. If the parties continue faithfully attached to each other, it is a mere ceremony. If otherwise, it becomes a fetter, riveting them to wretchedness, and only to be broken with disgrace."

But the fetter was assumed which riveted two to wretchedness. Obedient to the coarse, commercial standard of his day and place, Edward Irving turned aside from the holy inward law of love, and perjured himself to a woman base enough to demand marriage in fulfillment of a contract. How deplorable the result, let his sad history tell. A man may heroically obey a false law, may tread with saintly feet the wrong path, but the true law is inexorable; the wrong path leads astray. Nature avenges herself. All their nobility, heroism, self-sacrifice did not avail to rescue two brilliant beings from the doom to which they condemned themselves by their sacrifice of the higher spiritual law to the lower contract law. When they stifled the divine illumination under the pall of conventionality, their day of judgment rose and rolled to the bitter end for both. As it was in the beginning, is now, and ever shall be: in the day that thou eatest the forbidden fruit, thou shalt surely die.

While the maiden's heart was sore and sad for her lost love, and empty of hope, another man stood by her, strong if sardonic, somewhat surly and savage, yet responsive to her mood and subdued to her charms. His resplendent intellect

won her homage, his marked individuality piqued her somewhat flagging interest in life. He was intimately associated with the one man of all her many suitors whom she had loved; had, indeed, been brought to her by that man. She did not dream of marrying him. The idea, when it came, was promptly and decidedly, alas! not decisively, repelled. She admired the mind so much that she finally, in homage to it, accepted the man. She saw that he was misanthropic, impractical, incredibly snarling and cynical. But she thought she could mellow him with her sunshine, and that it would be a result worthy of her life. She did not know that the darkness rayed out from his own nature. She thought him great, which he was; generous, which he was not. She felt herself superior to him in birth and breeding, as she was. She felt him superior to herself in intelligence, which he was not. She believed him possessed of "all the qualities I deem essential in my husband—a warm, true heart to love me, a towering intellect to command me, and a spirit of fire to be the guiding-star of my life." She was not in love with him, but she believed she should love him. To the emptiness of her life a great work seemed to offer itself,—to foster a rare genius, to prepare the way of the Lord.

It was not an ignoble aim; and it rescues her good fame. In the light of their subsequent life, the story of their strange courtship is acutely painful. He was candid, but she could not understand. He did not try to deceive her. He did not deceive her more than he deceived himself. She was in her early twenties, with no experience of life but through the rosy mists of love. How could she know the coldness, the coarseness and crookedness, the hardness and blindness of the peasant nature in which that brilliant intellect was imbedded? She was all air and fire, yet with a firm touch upon the earth. There was fire in his heart, too; but it smoldered beneath the nether millstone, which only cracked and crumbled to the frosts of death. She took her measures wisely, poor, groping soul. She visited his family. They were of the rudest, while her own home had always been elegant, and her immediate family even distinguished. Indeed, so superior to his were her surroundings, that he says on his first visit: "I felt as one walking transiently in upper spheres, where I had little right even to make transit." She bore herself like an angel, and with her exquisite tact won the hearts of the little cottage, as she won hearts everywhere.

His father, mother, brothers, sisters she gathered into her sympathy, and paid to their sterling virtue the respect which soul should pay to soul.

And Carlyle himself bore well the test. As son and brother he was perfect. From his life's beginning to his life's close, nothing of affection or consideration or patience or help or sympathy was wanting to the simple and honorable family who loved him so loyally. Fractional, sneering, unjust to the rest of the world, he saw and magnified all the good in his own family and excused all the defect; with pen and purse, with advice and consolation, with tokens of remembrance when absent, and talk and companionship when present, with unstinted praise for their well-doing and the gentlest chiding and tenderest allowance for their short-coming, he was never weary of cherishing his kin. Indeed, the heaviest proof against him in his day of judgment is his illimitable righteousness, his divine patience toward them. With what judgment shall he be judged, who showed so clear an instinct regarding the family in which he was born, so stupid a brutality to the family which he made?

Worst of all, out of his own mouth he is condemned. He cannot plead ignorance or blindness. He saw clearly and spoke wisely. He espoused truth with a loud voice and called heaven and earth to witness. If he had practiced his own precepts, his wife would have been the happiest of women; his home the light of the world. He preached an unalterable conviction that justice and truth form the only base on which successful conduct, either private or public, can be safely rested—and immediately based his whole married life on injustice and a forsworn promise. He told his friend that literature was the wine and not the food of life; that household and social duties and enjoyments were indispensable to its symmetrical development. How could this delicately reared girl foresee that he would toss them all aside? "Your mind and my own have in them many capabilities," he said; "but the first of all their duties is to provide for their own regulation and contentment." Could this petted child of adoring parents surmise that his idea of "regulation" was to sacrifice every other contentment to his own will and whim? "At times, I confess," he admits, "when I hear you speak of your gay cousins, and contrast, with their brilliant equipments, my own simple exterior and scanty prospects and humble but to me most dear and honorable—

minded kinsmen, whom I were the veriest dog if I cease to love and venerate and cherish for their true affection and the rugged sterling worth of their character,—when I think of all this, I could almost counsel you to cast me utterly away, and to connect yourself with one whose friends and station are more analogous to your own. But anon, in some moment of self-love, I say proudly there is a spirit in me which is worthy of this maiden, which shall be worthy of her. I will teach her, I will guide her, I will make her happy.”

Could she discard him after this so lofty and touching appeal? Could she dream that his way of teaching her would be surlily to forbid her to correct her friend’s proof because “you do not know bad grammar when you see it any better than she does, and if you had any faculty you might find better employment for it”; that his mode of guiding her would be to force her to degrade two days over the relining of his beastly, worn-out man’s-boots; that he would make her happy by calling out for her pet dog, who was far more solace to her than his master, “Has that vermin come home yet?”

“Let us try,” he said, “if by neglecting what is not important and striving with faithful and inseparable hearts after what is, we cannot rise above the miserable obstructions that beset us into regions of serene dignity, living as becomes us in the sight of God and all reasonable men, happier than millions of our brethren, and each acknowledging with fervent gratitude that to the other he and she owed all?”

Could a girl of four-and-twenty happy summers, blooming in the sunshine of parental love, by any possibility foresee that this man who proposed to lead her upward into regions of serene dignity by striving only for what was important, would make such a caterwauling over his food that every dinner threw her into a panic, though, after his grumbling had tormented her to death, he could declare, “for grace, salubrity, and ingenuity, I have never seen such human dinners”; that by way of neglecting what was important this lofty intellect would whip out his pocket-handkerchief and ostentatiously dust the furniture, though in the light of the eternity which had snatched her from him, he was forced to declare that no such house as hers—“for beautiful thrift, quiet, spontaneous, nay, as it were, unconscious minimum of money reconciled to human comfort and human dignity—have I anywhere looked upon.”

This man, who was to lead the woman to strive only for what was important, grew "ever more and more difficult to feed, and more and more impatient of the imperfections of human cooks and housewives. He was most especially aggravating under a change" of housemaids. It is not much that he speaks of them as "that horse," "that cow," "that moon-calf," which, as Mrs. Carlyle protested, was often an injustice to them. It was no wrong that each new-comer had to be taught how to cook Mr. C.'s things, "Mr. C.'s sort of soup, Mr. C.'s sort of puddings, cutlets, etc." This any wife should be glad to do for any tolerable husband, who did not even pretend to compass her serenity. What is unpardonable is that the eater of Mr. C.'s soup should have forced the teacher of Mr. C.'s soup-maker to go down three pairs of stairs into the kitchen. A man who is able to own three pairs of stairs can never be pardoned for setting his wife at the top, to run over them every time she speaks to her cook, while himself absorbs the convenient floors between.

"Need I remind your warm and generous heart that the love which will not make sacrifices to its object is no proper love? Alas, without deep sacrifices on both sides, the possibilities of our union is an empty dream. To me, I confess, the union with such a spirit as yours might be is worth all price but the sacrifice of those very principles which would enable one to deserve and enjoy it."

How could she infer that through a long life Carlyle would steadfastly refuse to sacrifice anything to her? Whenever he was hurt, he howled. Just so far as he could, he interposed his wife's person between himself and the hard knuckles of fate. The blows fell on her with unremitting severity and he never winced. Indeed, the hardest of them were dealt by himself. He, who found language too poor to portray the virtues of his own mother, criticised her mother with a brutal frankness to which no mentioned trait of her in all these volumes lends necessity. As she appears even through his captious lens, she was graceful, vivacious, tender, wise,—worthy mother of her daughter. But "what," said Carlyle, coarsely, "is this caprice and sullenness in your mother but unhappiness in herself—an effort to increase her own scanty stock of satisfaction at your expense; or rather, to shift a portion of her own sufferings upon you?" And this was said of a mother whose whole life was a long hymn

of love to her daughter, and said because she could not approve and, in all persuasive ways, opposed the marriage of that daughter to a man whose steady habit for forty years proved to be the shifting of his sufferings upon his wife!

Not content with maligning her to her daughter, he allowed his insensibility to becloud his veracity, and implicated her relations with her dead husband, whom he never knew, and of which he had not the shadow of a right to speak. With the same child-like bluntness he writes to his wife: "The Chancellor is a very particularly ignoble-looking man—a face not unlike your Uncle Robert's." It was not malice apparently, but an absolute lack of sensitiveness toward his wife. Toward his father's family he was as full of tact and tenderness as the most loving heart could ask. They were a part of himself.

It has been Carlyle's great pretense and great praise that he hated shams, but no greater sham than he ever resounded through the world. The only palliation is that he was a sham to himself. He thought he was content with his peasant birth; and in reality his lowly origin was ever before him. He was a noble snob, but he was a snob of snobs. He honored his father and mother, but with a verbal and voluble honor which told how deep and abiding was his sense of their lowliness. Again and again he declared that, if he could have his choice of a mother out of the whole world, he would choose his own. But that ought to go without saying. He would not exchange his own for any ten mothers. Who would? He would not exchange his father for any king known to him. Proof? He proclaimed himself content to be unmoneyed, unpraised; to go gladly without the world's breath or the world's pudding, but never a man sucked harder for the one or stirred harder for the other, or roared louder at not being able to get them.

Mr. Froude shares Carlyle's deception. He admits his irritability, violence, selfishness; but signalizes his sacrifice of everything to his high mission. If honor was to come to him, says Mr. Froude, it must come unsought. On the contrary, he sacrificed nothing. He took all he could get, and was wroth with the friends who would not give him more. He sought honors just as other men seek them, and emoluments in ways that most men with a man's blood in their hearts would scorn. He took active steps to be appointed professor in the London University. He exerted himself to the utmost to be made successor of Doctor

Chalmers in the St. Andrew's University; and in a gush of gratitude at Jeffrey's attempts to help him, calls him the dear little duke—"the most sparkling, pleasant little fellow I ever saw in my life." But when Jeffrey refused to recommend him for an appointment: "Our relation is done, all but the outward shell of it." When he learned that a new astronomy professorship was to be established in Edinburgh, he hastened to seek it, and never forgave Jeffrey for not furthering him, although Jeffrey told him, in the highest style of civil service reform, that the appointment was entirely out of his own sphere; that the candidate would be appointed on his own merits; that no testimonial would be looked at, except from persons of weight in that branch of science, like Herschel and Babbage, without the least regard to unprofessional advisers. But Carlyle resented his failure to obtain this position with as much force and fervor as if he had been a machine politician, instead of a lofty and lordly philosopher, surveying with undisguised scorn the "entirely shallow, barren, unfruitful, and trivial," the "putrid, scandalous, decadent, hypocritical" society around him.

Froude himself, admitting that it is difficult to see by what reasons any conceivable body of men would have, at that time, been justified in preferring Carlyle, still professes doubt of Jeffrey's sincerity in pretending to fear that Carlyle could not handle delicate instruments without injuring them; but the most delicate instrument that can be intrusted to human hands, Jeffrey had seen Carlyle entreat with a roughness that was destruction. This he had vainly tried to rescue from his ruthlessness. It was but a slight revenge to keep the other from him; but he may well have taken an inward joy in the withholding.

"No man will give me money for my work," complains Carlyle. "If they pay me rightly, they shall have a paper or two; if not, not. Letter from Mill about a Radical review, in which my coöperation is requested; shall be ready to give it, if they have any payment to offer." This is not ignoble. But it is not noble. It is the same trait in Carlyle that it is in Tom, Dick, and Harry, who will never be mentioned as martyrs and never think of themselves as heroes. His own distinction was the correct one. He wrote to express his opinions. He published for money. For this he deserves neither credit nor discredit, any more than the singer or the shoemaker who lives by his calling.

Carlyle was willing, was greedy, to accept luxury on terms which a man should disdain. When Mrs. Welsh, unable to prevent her daughter's ill-omened marriage, and almost equally unable to live without her only child, besought Carlyle to occupy her house, he refused, unfeelingly, contemptuously. Two households could not go on together, he said. He must be master of his own house. But he was not in the least proposing to be master of his own house. He was not proposing to have a house. He was proposing to take his wife out of her luxurious home to his father's peasant cabin, and would have done it, had not his father, wiser than himself, forbidden; though, after his wife's death, he calmly recollects that even his visits to his mother, once a year, were "unpleasantly chaotic" and "comprised for both of us (his wife and himself), in respect to outward physical hardship, an amount larger than all the other items of our then life put together." Two households could go on together, it seems, if both were under his harrow. But when Mrs. Welsh, finding her loneliness intolerable, left her home, Carlyle could hardly be kept away. He would not live in it with her, but he saw no indecency in turning her out of it and living there himself.

After his wife was dead, Carlyle could find no peace except in writing to the world that her bright, ever-cheering presence in his home was literally the only cheering element there was. But the world has merely a secondary interest in his opinion. To one it was the life of life. Yet to that one he could so bear himself as to extort from her bright and laughter-loving soul the pathetic cry, "to see you constantly discontented and as much so with me, apparently, as with all other things, when I have neither the strength and spirits to bear up against your discontent, nor the obtuseness to be indifferent to it—that has done me more harm than you have the least notion of. You have not the least notion what a killing thought it is to have put into one's heart, gnawing there day and night, that one ought to be dead, since one can no longer make the same exertions as formerly; that one was taken 'for better,' not by any means 'for worse'; and, in fact, that the only feasible and dignified thing that remains for one to do is to just die, and be done with it."

Can art devise a more pathetic picture than poor Carlyle sitting in his darkened house, alone in the terrible awakening of

his Day of Judgment, reading these letters by the new revealing light, and smiting his breast before all the world with his useless "Alas! alas! sinner that I am!"

The Craigenputtoch episode is the type of the life and the character of these two human and inhuman beings. Craigenputtoch belonged to Jenny Welsh. Carlyle, with his marvelous willingness to profit by Mrs. Welsh's wealth, cast his longing eyes upon it. Jenny Welsh assured him he could not exist there a twelvemonth, and that for her part she could not spend a month there with an angel. But eighteen months after their marriage he took her thither, and there she spent seven years with as strong a possession of the devil as is often found in humanity. I speak not unadvisedly. Froude, his admirer and intimate friend, says that "if matters were well with himself, it never occurred to him that they could be going ill with any one else; and, on the other hand, if he was uncomfortable, he required every one to be uncomfortable along with him." This is the incarnation of selfishness, which is devil enough for this world.

Jeffrey remonstrated. He was in despair that the lovely, delicate woman should be snatched from the cheerful and distinguished society which she attracted in London, to be devoured by her dragon in the sour solitudes of Scotland. Nothing had changed. She was not less gay and social. Carlyle was not less contemptuous and dyspeptic. But to the Craig he would go, and then the thing happened which Jeannie Welsh had predicted—disgust. Aleck found the farm ruinous, and went away after four years' trial; but Carlyle had not been there four months before it became to him "this Devil's Den." His wife lost her health and her spirits, but that he never knew. "Jane is far heartier, now that she has got to work," says the unregenerate and indescribable peasant; but Froude, impartial as fate, says, "A mistake on Carlyle's part. Mrs. Carlyle had not strength for household work; she did it, but it permanently broke down her health."

"Jane is in a weakly state still," writes to John Carlyle this ogre, whose ogreness is sometimes fairly comical in its unconsciousness. "Her life beside me, constantly writing here, is but a dull one; however, she seems to desire no other. . . . I tell her many times there is much for her to do, if she were trained to it; her whole sex to deliver from the bondage of frivolity, doll-hood, and imbecility, into the freedom of valor and womanhood."

A pertinent suggestion to make to a woman who was wearing her life out on a desolate hill-top, milking the cows, and scouring the floors of a man who seldom spoke to her and left not a soul for her to speak to within fifteen miles.

But when the solitude begins to pall upon himself, he grows more appreciative. He even becomes a little softened and subdued by the appalling failure of the Craig plan, which he had pursued with such headlong stubbornness. His letters to his wife, when seeking to find some path away from his Hill Difficulty, are tender and appealing. Jeffrey was thoroughly angry with him for his willfulness and selfishness, and he turned to Jeannie with desperate need, though with grotesque comfort: "Let us not, dear Jeannie, complain of solitude. I have still you, with really a priceless talent for silence!" The one thing which Jeannie loved was good, exciting talk.

"Yes, Jeannie, though I have brought you into rough, rugged conditions, I feel that I have saved you. As Gigmaness you could not have lived; as woman and wife you need but to see your duties in order to do them." Welcome words from a man who saw his duties with preternatural clearness, only to kick them instantly, violently, vociferously out of his path.

"Do thou help me, my little woman; thou art worthy of that destiny." Is it any wonder that Jeffrey lashed the overweening self-conceit which appointed its owner the elect of Heaven and reckoned any menial service done to himself as an errand of the Almighty.

But presently Carlyle began to discover that "a little talk were wholesome for *me*!" "But it is not to be had," he sighs, "and one can do without it. My Janekin, if not a great speaker, is the best of listeners." And a very good reason for it Froude gives—that Carlyle was intolerable when he was contradicted. Janekin was wise to let him have the talk to himself, though she, too, was a brilliant talker.

Very soon, even this modified resignation broke out into open rebellion.

"I must to Edinburgh in winter; the solitude here, generally very irksome, is threatening to get injurious, to get intolerable.

"Craigenputtoch cannot forever be my place of abode; it is at present and actually one of the worst abodes for me in the whole wide world.

"The time for returning to Puttoch will too soon be here. I have not abated in my dislike for that residence, in my conviction that it is no longer good for me. Of solitude I have really had enough."

But poor Jeannie had long been desperately sick and disheartened without attracting the smallest help from Carlyle. As fast as the solitude became irksome his views of duty became clear.

"Quarrel not with deliberate feeling that this wilderness is no wholesome abode for me; that it is my duty to strive, with all industry, energy, and cheerful determination, to change it for one less solitary."

Presently, duty was merged into desperation.

"Nothing but the wretchedest, forsaken, discontented existence here, where almost your whole energy is spent in keeping yourself from flying out into exasperation. Why not bolt out of all these sooty despicabilities and lying draggle-tails of byre-women and peat-moss and isolation and confusion and go at once to London? Yes, we must try it. Life here is but a kind of life in death, or rather one might say, a not being born; one sits as in the belly of some Trojan horse, weather-screened, but pining, inactive, neck and heels crushed together. Let us burst it in the name of God!"

He had forgotten that when he was—is it too colloquial? it is certainly not too strong, and it certainly is Carlylesque, to say—hell-bent on going to the Craig. He had written, persuading his wife:

"Oh! Jeannie, how happy shall we be in this Craig o' Putta. We shall sit under our bramble and our saugh-tree, and none to make us afraid; and my little wife will be there forever beside me, and I shall be well and blessed, and the 'latter end of that man will be better than the beginning.'"

And so this great genius, after seven years of failure and exasperation and the ruin of his wife's health and spirits, had labored along to the same conclusion at which his wife, with all the frivolity, dollhood, and imbecility of her sex, had arrived in one moment. But he had had his way. He had carried out his great governing principle, his "eternal axiom, the law of nature, which no mortal departs from unpunished—that the man should bear rule in the house, and not the woman." If he could have seen himself as he was, he would have seen this native sovereign, man, descending the Craig of Putta in a much more draggle-tail suit than the byre-women from whom he fled.

It seems incredible, yet signs are not wanting that Carlyle was unconsciously jealous of the superior social position of his wife, and was resolved to reduce her to the level of his mother and sisters. He made her bake and sweep and scrub, like any

byre-woman of them all, till he could announce that "Jane is almost stronger in anti-fine-ladyism than myself"; but when a fine lady who was not his wife came by and beckoned to him, he left wife and work to follow her without betraying the smallest symptom of "anti-fine-ladyism."

When Jeffrey had tried to lighten the poor wife's burden by securing a place for John Carlyle with a fine Lady Clare, Carlyle was pleased to write:

"I must also esteem it no small felicity you naturally have: that of associating with a thoroughly courteous, society-cultivated woman. No higher piece of art is there in the world. The weak, lovely one will be loved, honored, and protected. Is not, in truth, a noble woman (noblewoman or not) worth reverencing?"

Just such a piece of high art, just such a weak, lovely one, just such a courteous and society-cultivated woman was associated with Thomas Carlyle, and he had loved, honored, protected, and revered her with his old boots, with his acrid ails, with his violent words and vicious temper and long neglect, till heart and hope died out of her. "Of course, I am sad at times, at all times sad as death, but that I am used to, and don't mind."

Did he give no heed to the words? Did no wonder haunt him as to the process which had rendered the radiant, high-hearted girl "at all times sad as death"? He gives no sign. He had degraded a bright spirit to base uses, and he did not know it. She recognized while accepting her fate. "You may be better without me," she wrote him, "so far as my company goes. I make myself no illusions on that head; my company, I know, is generally worse than none; and you cannot suffer more from the fact than I do from the consciousness of it. God knows how gladly I would be sweet-tempered and cheerful-hearted for your single sake, if my temper were not soured and my heart saddened beyond my own power to mend them." Could a man with a heart in his bosom fail to give some tender, re-assuring words to such a pitiful appeal? Carlyle did so fail.

"The comfort," she writes in her next letter, "is the greatest part of the grievance for my irrational mind. I am not consoled but aggravated by reflecting that, in point of fact, you will prefer finding 'perfect solitude' in your own house, and that if I were to do as nature prompts me to do, and start off home by the next train, I should take more from your comfort on one side

than I should add to it on another." And he did not contradict her!

His intense selfishness Mrs. Carlyle, in true wifely fashion, tried to generalize, and so ward off from him individual condemnation. "Mr. Carlyle, being a man, cannot understand to exact the least bit less attendance, when we are reduced to one servant again, than he had accustomed himself to exact from the two. So I have all the valeting, and needle-womaning, and running up and down to the study for books, etc., to do myself." But it was not his gender that made him use his wife for a beast of burden. It was his own specific and gigantic selfishness.

To his genius chiefly his wife was, by good fortune, able to lay his appalling sins. Her beast was a lion, king of beasts, and by that token she was able to bear and upbear his beastliness. She mentions his enormous domestic crimes with a frankness which could not otherwise have existed. Her pride recounts what any other pride would have hidden. "When one has married a man of genius, one must take the consequences," was her prevailing plea. "My man of genius," was her constant characterization. But Carlyle himself had set up another standard wherewithal he should be judged in his Day of Judgment. "What is genius," he had written to Miss Welsh, "but the last perfection of true manhood—the pure reflection of a spirit in union with itself, discharging all common duties with more than common excellence?" Let us set our minds and habitudes in order, and grow under the peaceful sunshine of nature, that whatever fruit or flowers have been misplanted in our spirits may ripen wholesomely and be distributed in due season. And in pursuance of this principle he had neglected every common duty, had defied every common obligation, had imposed them all upon his wife, had stamped down every flower and fruit of her gentle nature, and demanded of her the service and forced upon her the position of a household drudge.

It is idle to plead that Mrs. Carlyle was too like her husband; that she irritated him with domestic details; that she was over-jealous, capricious, hysterical, petty. They understand neither the human heart nor the English language, who say it. It is not a question of opinion, but of fact. The records of her life disprove the charge. She was strong, discerning, positive, effective, as well as poetic and affectionate. In her head was thought, in her eyes was sight, in her mind was judgment, from her lips

flashed wit. All her ways were winsome. She was a beauty and a belle. Was it not of her that Leigh Hunt wrote?

“Jenny kissed me when we met,
 Jumping from the chair she sat in;
 Time, you thief, who love to get
 Sweets into your list, put that in.
 Say I'm weary, say I'm sad,
 Say that health and wealth have missed me;
 Say I'm lonely, dull, but add
 Jenny kissed me.”

Poets do not write such verses of a mere drudge. Tennyson would not come from afar to have a long, quiet chat with a dull woman; although it is in exact accordance with the way of the world that Carlyle's big brutish brother should roll in from his kitchen pipe to babble, and another friendly bore should maunder in the parlor, and the two together stay out Tennyson, while the two who wanted to see each other and nobody else “got scarcely any speech” together. Darwin frequented her house, drove her about with mock submission, admired her achievements with the needle and satirized her husband's indifference to it. Brewster and De Quincey and Sir William Hamilton frequented her, won by the peculiar personal grace which was her inalienable charm. Mazzini confided in her. Cavaignac ate her hash and claimed her for a French woman. Jeffrey was fascinated. Few passages in the life of men have more vital interest than the ardent friendship of Lord Jeffrey for Mrs. Carlyle, and never a man appeared in a more amiable and honorable light. He admired her intelligence; he yielded to her womanliness; he was appalled, enraged by her situation. The passion of a lover, the compassion of a father, met in the affection which at once delighted and embittered him. It is not to Carlyle's credit that he never shows the slightest uneasiness at Jeffrey's attitude toward his wife. It was not the nobility of trust but the stolidity of indifference. His own insensibility regarding her was attended by an utter insensibility to the feelings of other men regarding her. He seems to have had no curiosity, even, about her inward life. Her relation with Edward Irving made no more impression upon him than the ogling of a turtle-dove. Most men would have raved at Jeffrey's interference, but Carlyle did not heed it. Jeffrey's bearing and course show forever how blameless and pure may be the friendship of a

high-minded man for a high-minded woman. Never was there the smallest occasion for vulgar jealousy ; but if Carlyle had been a man, instead of a stone, he would have died of despair at seeing how differently from a stone a man bears himself toward a woman. Being a stone, he never saw that Jeffrey was a man. The man resented with keen but impotent bitterness Carlyle's insensibility to the jewel he wore in his breast. He implored Carlyle to be good to his wife ! "Take care," he wrote, "of the fair creature who has trusted herself so entirely to you,—whose great heart and willing martyrdom will make the sacrifice more agonizing in the end." A dull resentment does seem to have awakened sluggishly in Carlyle's mind toward Jeffrey, but it was rather because Jeffrey did not sufficiently advance his fortunes than because Jeffrey loved his wife. Nothing can exceed the patience and delicacy with which Jeffrey strove to assist Carlyle—even with money, when all else failed. It was noble in Carlyle to refuse Jeffrey's money, but he did not refuse it nobly. Jeffrey never appeared better or Carlyle worse than in this transaction. There is no mistake. We have the written words of both, which show Jeffrey therein to be of heaven and Carlyle earthborn. Carlyle came to look upon Jeffrey with scant respect ; but Jeffrey was indisputably, so far as appears in these books, the greater man. Carlyle complained that Jeffrey intellectually considered the great business of a man to be happy. But this was a better theory than Carlyle's, who considered the great business of a man to be miserable. Jeffrey never took half the pains to be happy that Carlyle took to be wretched. Jeffrey never sacrificed to innocent pleasure a tithe of what Carlyle sacrificed to wicked, because needless, pain. Carlyle consoled and cajoled himself with thinking that "Jeffrey dwells in the glitter of saloon chandeliers, walking in the vain show of parliamenteering and giganity, which, also, he feels to be vain ; we, in the whirlwind and wild-piping battle of fate, which, nevertheless, by God's grace, we feel to be not vain and a show, but true and a reality." But the whirlwind and the piping were Carlyle's own breath, which he mistook for the voice of God, who, as of old, was not in the whirlwind, the earthquake, and the fire,—which Carlyle was forever stirring up,—but in the still, small voice of Jeffrey's gentle sympathy and succor. And when Carlyle had tooted himself out of breath on the top of Craigenputtoch, he was as eager to come down into the glitter of saloon chandeliers

as fashion's giddiest devotee. Even while he complained, he knew that his complaint was groundless. "I have heard Jeffrey say," he continues, "'If folly were the happiest, I would be a fool.' Yet his daily life belies this doctrine, and says, 'Though goodness were the most wretched, I would be good.'" It is an exact type of the two men. Carlyle himself, when laying down principles for other men's guidance, admits it by crying out against "the everlasting clatter about virtue! virtue! In the devil's name, be virtuous, and no more about it!" But, practically, his virtue was all clatter. While he was vociferating his own superiority to the clownish herd, Jeffrey was silently practicing, and thereby proving, his own superiority to Carlyle. Carlyle clanged to the astonished heavens the dominant claims of the nearest duty, while his home resounded with the tramp of his iron heel upon all duty whatever. Jeffrey professed only a somewhat passive acceptance of things as he found them, but lavished his talents and his time, his patience and his genius upon the effort to make them better. Carlyle left his wife to fight alone the Amalekites, and the Hittites, and the Jebusites, while he stood on Pisgah and shrieked so shrilly about the promised land that one would choose to go back to Egypt rather than advance under such ululation. Jeffrey took the forlorn and deserted pilgrim by the hand and led her tenderly toward the green pastures and the still waters which he discerned as clearly as Carlyle, and to which he far better knew the way. If life is more than meat, and the body than raiment; if to be is better than to talk; if it is higher work to sculpture a symmetrical soul than to write a sensational book,—then Jeffrey is the greater man; and the woman whom such men so loved was a great woman.

GAIL HAMILTON.

OVERPRODUCTION.

ALTHOUGH this is hardly a time of abnormal business depression, a great part of the industrial energies of the country are unemployed because of what is commonly called overproduction. We hear so much, and from so many quarters, of this overproduction that it is no wonder that there are many who hold, more or less definitely, that the great improvements in machinery and industrial processes have brought "dull times"; that the difficulty so many find in making a living is due to the increased capacity given to labor by discovery and invention, which have so reduced work that there is not now enough of it to go around, and that, to secure a more equitable division of the precious thing, we should limit the amount of work any one is permitted to do.

Ideas which thus reverse the principles we instinctively recognize in the every-day affairs of life are by no means confined to what are considered the less intelligent classes. They permeate the press, crop out in all discussions, and are carried into effect in legislation. No more than the housewife wants grease spilled over her kitchen floor, that she may have the work of cleaning it up, does any one want work for the sake of work. What they want is the things that work produces. Yet we maintain a tariff having for its express purpose the preventing of other nations from robbing us of work, and trunks are searched and mail matter opened lest any one should escape the penalty of bringing into the country the product of work done abroad. And so while workingmen protest against production by convict labor, manufacturers see no better remedy for dullness of trade than curtailing production.

If there really be such a thing as general overproduction, if we are really suffering from a plethora of wealth, then the remedy lies in the destruction of wealth. This is a *reductio ad absurdum*.

dum. But the fact cannot be disputed that the period of the Civil War, when the greatest destruction of wealth this country ever saw was going on, was a time of great business prosperity and industrial activity. Nor can this be explained upon any theory that we were then borrowing of the future. To borrow of the future is a physical impossibility. By no process of financial juggling can any one eat to-day the egg that is to be laid to-morrow. The ships that were sunk, the houses that were burned, the shot and powder fired away, and the immense amounts of other wealth unproductively consumed or wantonly destroyed were not future ships, houses, powder, and shot, but existing products of labor. Nor did we even borrow from abroad. As a people, we owed less to foreign nations at the end than at the beginning of the war.

Is there, then, such a thing as overproduction? Manifestly, there cannot be, in any general sense, until more wealth is produced than is wanted. In any unqualified sense, overproduction is preposterous, when everywhere the struggle to get wealth is so intense; when so many must worry and strain to get a living, and there is actual want among large classes. The manner in which the strain of the war was borne shows how great are the forces of production which, in normal times, go to waste; proves that what we suffer from now is not overproduction, but underproduction.

Relative overproduction there, of course, may be. The desires for different forms of wealth vary in intensity and in sequence, and are related one with another. I may want both a pair of shoes and a dozen pocket-handkerchiefs, but my desire for the shoes is first and strongest; and upon the terms on which I can get the shoes may in large measure depend my ability to get the handkerchiefs. So, in the aggregate demand for the different forms of wealth, there is a similar relation. And as, under the division of labor characteristic of the modern industrial system, nearly all production is carried on with the view, not of consumption by the immediate producers, but of exchange for other productions, certain commodities may be produced so far in excess of their proper proportion to the production of other commodities, that the whole quantity produced cannot be exchanged for enough of those other commodities to give the usual returns to the capital and labor engaged in bringing them to market. This disproportionate production of some

things, which is overproduction in relation to the production of other things, is the only kind of overproduction that can take place on any considerable scale, and the overproduction of which we hear so much is evidently of this character.

But what is the cause of this relative overproduction? That is the important question. Does it spring, as some of the socialists seem to think, from the lack of intelligent direction in production, which requires for its remedy governmental supervision of industry? Is it due to any removable cause, or must we, as the penalty for having called steam and machinery to the aid of human muscles, accept conditions in which men suffer from want while warehouses are glutted?

To answer these questions let us examine the phenomena more closely. What is relative overproduction when viewed from one side is evidently relative underproduction when viewed from the other. And what we call overproduction as to any particular commodity or commodities may proceed from increased production of things of one kind or from decreased production of things of other kinds. Thus the original impulse which produces relative overproduction may be one stimulative of production or one restrictive of production. But, while the phenomena of relative overproduction may thus arise from causes opposite in essential character, it is only within a limited field and to a limited extent that causes so different in their nature can produce similar results. This we may see if we note the different general effects which follow increase or diminution of production in any special branch of industry. Let us suppose, for instance, that there is, from some discovery or improvement, an increase in the production of coal, out of proportion to the increase of other productions. More coal thus being brought to market than can be sold at previous rates, the price falls. The result is, that all the consumers of coal who so desire can increase their consumption of coal, and those who do not wish more coal can increase their consumption of other things, while, in all branches of industry where coal is used, the cheapening of coal reduces cost and stimulates production. Thus the general effects of the increase in the production of coal, as they become diffused over the whole field of industry, are to increase all other production, and to reëstablish an equilibrium between the production of coal and the production of other things on a basis of increased production.

But suppose some cause, natural or artificial, to check the production of coal so that it falls below the previous proportion to other production. Its price rises, and the consumers of coal must use less coal or less of something else. Miners, transporters, etc., of coal find themselves out of employment, and their power of purchasing commodities cut off or diminished. At the same time, the enhanced price of coal makes production more costly in all branches of industry which make use of coal, and thus the general effects of the diminution in the production of coal are to reduce all other production, and the restoration of equilibrium, when it again takes place, will be on a basis of diminished production. Thus we see that the general effect of increase of production in any particular branch of industry is to increase production in all branches, while the general effect of decrease of production in any particular branch of industry is to generally decrease production.

Or to put it in another way: Trade being the exchange of commodities for commodities, in which money is but the common measure of values and instrument of transfer, supply of commodities of one kind is demand for commodities of other kinds. Whatever, therefore, causes the bringing to market of an increased amount of commodities, at once increases the supply of those commodities and the demand for other commodities, thus increasing the volume of trade and generally increasing production. Whatever, on the other hand, diminishes the amount of commodities brought to market, at once decreases supply and diminishes demand, lessening the volume of trade and decreasing general production.

This we see very plainly in relation to those branches of production in which the varying character of the seasons causes marked alterations. Good crops mean increased demand of all kinds, active trade, and general prosperity, although it may be that to many farmers, or perhaps to farmers in general, the immediate benefit of unusually large crops is neutralized by the lower prices consequent on relative overproduction. And reversely, although to many farmers, and perhaps to farmers in general, the immediate effect of a poor crop may be compensated for in higher prices, yet poor crops mean to the community at large decreased demand of all kinds, dull trade, and hard times.

It is thus apparent that, while relative overproduction of any commodity or group of commodities may arise either from

increase in the production of these commodities or from decrease in the production of other commodities, yet there are differences in the general results springing from these two differing causes which will enable us to infer from which of the two any particular disturbance of the equilibrium proceeds. If the nature of the primary cause be to increase production, its secondary or diffused effects must be to stimulate production generally, to augment the volume and increase the briskness of trade; and whatever be the disturbance in the branch or branches of production in which the impulse is first felt, it will soon pass away as the stimulating impulse communicates itself to other branches. But when the nature of the primary cause is to check production, the impulse persists in the checking of other production, and its general effects are to diminish demand and cause dullness in trade, the disturbance which it first causes tending to perpetuate itself in wider circles, causing a dislocation in the interlaced machinery of production and exchange, which is finally reduced only at the cost of deprivation and suffering.

To illustrate, let us suppose discoveries or inventions which so increase productive power in certain branches of industry that, even with the increased demand which follows reduced price, not so many hands are needed in those employments as before. But the same cause which thus displaces labor in certain employments operates, in the way before pointed out, to create a greater demand for labor in other employments and thus to facilitate redistribution without loss or suffering. Suppose, however, a check to production, which operates to a like extent in lessening the demand for labor in the same branches of industry. The cause which thus displaces labor in these departments operates, in this case, to reduce the demand for labor in other departments, making it harder instead of easier for the labor displaced in one occupation to find employment in others. Displacement thus tends to further displacement, and waste and suffering are extended and protracted.

Looking at the phenomena which present themselves to-day in the dullness of trade, the forced idleness of laborers, and the curtailment of production in so many branches of industry, and which in times of marked industrial depression present themselves in aggravated form, there can be no difficulty in deciding to which class of primary causes they are due. They are not due to causes primarily operating to increase production,

even if to increase it disproportionately, but to causes which primarily operate to check production. It is not true, as the New York "Herald" says, in cutting down the margin of the news-dealers, that the country is producing too much—an assertion that in one form or another is echoed generally by the press. What is true is that the country is producing too little. Reductions in wages and in profits, the fall of interest, dullness of trade, the involuntary idleness of men who would gladly be at work, are not the symptoms of too great a production of wealth; they are the symptoms of restriction upon the production of wealth.

Nor have we far to look to recognize restrictions upon the production of wealth sufficient to account for all these phenomena—restrictions which prevent that interaction of demand and supply which, under conditions of freedom, will determine the proportion that all branches of production should bear to one another with infinitely greater promptness and exactness than could any human intellect. In the first place, almost all our taxes, either purposely or incidentally, restrict production. Taxes upon the exchange of commodities are as much taxes upon the production of commodities as taxes directly levied upon production. We maintain an enormous tariff upon imports for the express purpose of hampering and restricting the exchange of commodities—a tariff which extorts from the producers of the country a greater revenue to the Government than even the profligacy which it has engendered can find excuse to spend; which in addition extorts from producers a probably still greater sum for the benefit of favored individuals and corporations, whose lobbyists almost mob Congress when any proposition for the reduction of taxation is made; and which still further causes waste and loss that probably exceed both what goes to the Government and what goes to the favored interests. Our national internal revenue taxation is, moreover, not merely for the most part a direct tax upon production,—for, whatever may be said against the use of whisky and tobacco, their production, from the economic stand-point, is as truly the production of wealth as is the production of bread and cheese,—but it is a taxation which creates monopolies.

Nor have we even internal free trade, although, thanks to the constitution, the political power is prohibited from interfering with it. But we have suffered the corporations to whom we

have left the control of the great highways over which our internal commerce must pass, to assume the taxing power. They are not only suffered to practically charge their own prices for transportation, but they are permitted to impose what are virtually differential duties. They not only charge more for carrying goods a shorter distance than for a longer distance, but make discriminations not founded upon bulk, weight, or risk, which have the same effect as protective duties, drawbacks, and bounties.*

To all these checks and impediments to production,—these barriers which prevent that free interaction of supply and demand which would automatically preserve the proper proportion between the various forms of production,—we must add in the account much of the taxation levied by our States, counties, and municipalities. How local taxation operates to check production, we may see from the marked stimulus that has in some of the States been given to certain forms of production by the promise of exemption from taxation for a term of years. But it is hardly necessary to point to these, since it is self-evident that the taxation of wealth must tend to reduce the production of wealth. To tax savings is clearly to lessen the incentive to save; to tax buildings, to lessen the incentive to build; to tax the improved farm on its improvements is to lessen the reward of the farmer's toil and to discourage improvements. In fact, our State and local taxes are in large part as stupid as our national taxes. Even one too careless or too dull to see through the fallacies of protection must see that to tax wealth is to lessen it, and to tax improvements is to check improvement. When dogs are too many, we impose a dog tax. To lessen the number of liquor saloons, we impose a tax upon liquor saloons; and in the same way taxes upon buildings, or goods, or ships, or railroads, or any other desirable form of wealth must operate. Thus in many ways, directly and indirectly, purposely and incidentally, is production hampered and checked. But after we have considered all this, a still greater and more important check to production remains.

*“When such duties [turnpike tolls] are imposed not according to bulk or weight, but according to the supposed value of the goods, they become properly a sort of inland customs or excise which obstructs very much the most important of all branches of commerce, the interior commerce of the country.”—*Adam Smith, Wealth of Nations, Book V., Chap. II.*

What is production? In all its forms, it is, in the last analysis, the exertion of labor upon land. Therefore, the value of land—the price that labor must pay to obtain the use of land—operates as a constant bar to production. We are accustomed to regard increase in land values as the evidence of general prosperity. So it is, after a fashion, just as the greatness of the burden piled upon a mule's back is evidence of his strength. But those who get their living by their labor have as much reason to congratulate themselves upon the advance of land values as the pack-mule has to congratulate himself on the increase of his load. The increase of land values means that labor must pay more for the use of land; that of the aggregate production a larger share must go to those who do nothing to aid production; for though the individual land-owner may be also a laborer or a capitalist, or both, yet no land-owner, as a land-owner, contributes in any way to production. He is a mere burden and parasite—a dead weight that production is forced to carry, because of his appropriation of the natural factor of production.

To see how the value of land—and especially that speculative value that is an anticipation of what labor in the future may be forced to pay—bars and checks production, whoever reads this may see if he will look around him. Wherever men have begun to settle and land to acquire value, there the repressive effect upon the production of wealth is visible. To illustrate by an example. In New York, the pressure of population is so great that no one, unless he be rich, dreams of having a house to himself. The vast majority of the people live, family above family, in one, two, or three rooms, most of them wanting in light, in ventilation, and in facilities for cleanliness and decency. Tenement-houses, fifteen stories high, are now being put up, and the newer dwellings cover ninety feet of one-hundred-foot lots. Yet on Manhattan Island there are over fifty-eight thousand absolutely vacant lots; and, to say nothing of Brooklyn, over one-half of the land within the corporate limits of New York is unbuilt upon. Why does not the great demand for houses cover all these vacant lots in a single season with buildings? It would, were there not a barrier to the production of houses that rises with the demand. That barrier is the high price of land. Before the man who wishes to build a house can get a lot on which to build he must pay from \$5000 to \$75,000, or agree to pay an equivalent ground-rent; and when

he gets his house built, he will be fined with a tax upon it for having thus added to the wealth and conveniences of the city. And so goats and rubbish occupy vacant lots, while human beings are crowded into tenement-houses under conditions that produce physical disease and moral deterioration.

What may be seen in New York may be seen in degree in every city in the land; and through the country, population will be found to be scattered and emigrants toiling past vacant or half-used acres, impelled by the same cause. Wherever population is likely to come, wherever labor will soon seek for land, there does the dog-in-the-manger plant himself, to prevent production until he gets his legalized black-mail, and in many cases refusing what black-mail he could now get, in the hope of greater black-mail in the future. Here is the great check to production, which, gathering force with every season of half-way prosperity, so restricts production as to disturb the symmetry and coördination of industry, and, propagating itself in lessened demand, produces these phenomena so generally attributed to "overproduction."

It must be manifest, indeed, to any one who will think a moment, that phenomena so wide-spread and persistent must come mainly from barriers which prevent labor from applying itself to land. The occupations which most largely and directly make use of land are the primitive and fundamental occupations. All other occupations rise out of and rest upon these. The manufacturer and merchant presuppose the farmer. A community could not exist in which all men were tailors, printers, jewelers, or machinists. Starvation would ensue. But communities in which all men are farmers may exist. That is to say, in all the secondary and derivative occupations, production depends upon production in other occupations, but in the primary occupations which directly obtain wealth from nature there is no such limitation. In these, men can directly supply their primary wants, and increased production in these increases the demand for production in secondary occupations which minister to secondary wants. Thus, when land is free to the laborer, whatever relative overproduction may occur can only be trivial and temporary, the possibility of indefinite expansion in the primary occupations sufficing to take up the displaced labor and restore equilibrium. Chronic dullness of trade, protracted industrial depression, is only possible when this recourse is prevented.

What, and what alone, is needed to secure the proper proportion of the different forms of production, the health and symmetry of the industrial organism, is freedom. Idle labor, wasting capital, the glut of markets, the co-existence of poverty and of unused wealth are the results of restrictions which prevent the free circulation of productive forces. The remedy is in the removal of restrictions. This may be accomplished in a simple way.

Taxation upon the production, exchange, or accumulation of wealth checks production; but taxation which falls upon land values reduces a barrier to production. Therefore, to give productive forces freedom, all we have to do is to concentrate our taxation upon land values.

And in thus making land free to the laborer, in thus removing the restrictions which now hamper the interaction of supply and demand, we should so simplify our governmental machinery, so remove corrupting influences from our politics that we might, without fear of jumping from frying-pan to fire, include in the province of public administration such properly public functions as the working of telegraphs and railroads.

HENRY GEORGE.

NATIONAL DEFENSE.

THIS subject has received the attention of the ablest official minds in the United States—civil, military, and naval. The general principles of the national defense have never been questioned by the men whose duty it has been to make the subject their study. There have been disagreements in matters of detail, and of the two branches of the service each has, at times, been led by zeal to place too much stress upon the importance of its own duties. But consultation and discussion among those members of the army and navy who have in view the single object of doing that which is best for the country's defense have always brought about the best results; and I venture the assertion that there is but one opinion to-day among those who have thought seriously on the subject as to the proper method of defending the United States against foreign attack.

During the War of Independence the sea-coast defenses which existed at its commencement were but little improved. The evacuation of Boston by the British was hastened by the erection of entrenchments on Dorchester Heights. The forts in the harbor were afterward occupied by our troops, and Boston was not again molested during the war. Charleston was successfully defended against the attack of a British squadron. The ships-of-war built by order of Congress and privateers inflicted great injury on British commerce between 1775 and 1783, and descents were even made on the coasts of England and Scotland by Paul Jones.

The improvement of the national defense between 1783 and 1812 was small, so far as the land service is concerned, although something was done in the fortification of the principal harbors and sea-ports. All towns of considerable size on the sea-board, from Portland, in Maine, south to New Orleans, were defended by small fortifications. From the close of the Revolu-

tionary War until 1797 there was virtually no United States navy, although a few small vessels were kept in commission by some of the States. From 1797 until 1812, several large ships-of-war and many smaller vessels were built and commissioned. The ships did good service during the war of 1812, and with the smaller vessels did credit to the American flag in the Tripolitan war. A few of them remained in existence until lately, and one, the Congress (rebuilt), was sunk by the Confederate ram Virginia (the Merrimac) in Hampton Roads, in 1862.

During the war of 1812, the Canadian frontier was defended by forts and fleets. The other frontiers then to be defended were those of the Atlantic and the Gulf, leaving the Indian frontier out of the question. The enemy was repulsed at Stonington, landed on the Potomac with little opposition, burned Washington, failed in the attempt to capture Baltimore, being checked at North Point and Fort McHenry, and was again foiled at Charleston, and Mobile, and New Orleans. The history of the navy from 1812 to 1815 is as well known to this generation as it was to its contemporaries. It does not seem, from the record of the war of 1812, that Great Britain attempted the invasion of the United States with the hope of making a permanent lodgment, but only for raiding and destructive purposes, as in the case of the burning of Washington.

Immediately after the close of the war of 1812, in the year 1816, President Madison formed a board of engineer officers, upon which was imposed the duty of devising a system of works of defense of the frontier of the United States. He also, by authority of Congress, called General Bernard, a French engineer officer of distinction, to preside over this board, a selection which caused the resignation of some of our best engineer officers, notably that of General Joseph G. Swift, at that time chief of engineers. This board did its work faithfully, and devised a system of fortification for the frontiers which was adopted by the General Government, and had been in a spasmodic course of execution from 1816 until the commencement of the Civil War in 1861. The Indian frontier, which extended from our Northern boundary to the mouth of the Sabine River, skirting the one hundredth degree of west longitude, was an important feature of the national defense at the time. In any discussion of the subject to-day, no account need be taken of any such frontier. The acquisition of Califor-

nia, the settlement of the Far West, and the consequent elimination of the Indian race, have destroyed it; and, indeed, in the quietest times it moved westward continually, and was never a fixed line.

The principles upon which the board of 1816 acted were founded upon the art of war; and if this assertion is true, the same principles should guide to-day, with the understanding that such modifications should be made as have become necessary from the improvement in war material of all kinds, the introduction of steam in the navigation of the ocean, and the building of railroads. The approaches from the sea to all large cities were to be defended by fortifications, which could not only resist attacks from fleets, but would require a regular siege, if attacked from the land side. The defenses for smaller places and harbors of refuge were to be correspondingly weaker, but strong enough to prevent a foreign fleet from taking refuge therein, and to defend our own vessels which might be forced to seek shelter from attack by an enemy's fleet. In time of war all of these permanent defenses were to be garrisoned by volunteers and militia taken from the nearest inhabitants. The regular army was to be the merest nucleus, only kept up for the purposes of caring for the forts, teaching new levies when war began, and protecting the Indian frontier. The navy was to be kept at such strength that it was to be able to protect our commerce and the honor of the flag in time of peace, and to cope with an enemy's fleet in time of war on the open sea, or to assist in the defense of our harbors. Such, in brief, was the system of defense adopted under the spur of the experience of the war with Great Britain. When this system was adopted, the infantry weapon was the flint-lock musket, the largest cannon afloat or ashore did not throw shot exceeding forty-two pounds in weight, ships of war were propelled by sails, and their strength was determined by the forces of the winds and waves. The strength of the forts, too, was what was required to resist breaching by the naval batteries of those days.

Shell guns were not then in use. Mortars of ten inches caliber were used, but mortar fire from or against vessels in a seaway had never been considered efficient. In the interval between the British war of 1812-15 and the Mexican war of 1846-48, the improvements in arms and ships were small. The percussion lock had been invented, but was not in use by our infantry.

Shell guns for fortifications and ships, of caliber as great as ten inches, had been brought into use; steam ships-of-war had been built, but these were regarded as experimental rather than practical, and the construction of railroads between important points in the United States had been commenced. During this same interval the system of defense adopted had been sharply discussed by advocates and enemies. Mr. Calhoun, Mr. Poinsett, Mr. B. F. Butler, of New York, Mr. Conrad, all as Secretaries of War; Commodore Morris and General Totten, and other engineer officers, all writing officially, sustained it; while it was attacked, with different degrees of violence and ability, by General Cass, as Secretary of War, in the Cabinet of General Jackson, who was President of the United States at the time, by General Gaines, and by a few officers of the navy and engineer officers of the army. But the system progressed in spite of opposition, and at the commencement of the Civil War the United States were reasonably well protected against foreign attack, considering the conditions of the attacking and defending forces.

Between the end of the Mexican War and 1861, the forces of attack and defense had greatly increased in power, and the United States, although lagging behind other nations, had to some extent kept up with the improvements in ships and guns and small-arms, but no large quantities of war material had been accumulated. Screw war steamers of great size, but not of great speed, the engines partially protected from shot, had displaced side-wheel steamers, and their armaments were nine-inch and eleven-inch guns. For coast defense, eight-inch, ten-inch, and twelve-inch guns were substituted for the old forty-two and thirty-two pounders, and the guns afloat and ashore were equal in efficiency to those in use among other nations. Rifled guns were, up to that time, experimental, and were not in general use. The rifle-musket had taken the place of the smooth-bore, and the soldier had confidence in his weapon, a feeling which he never before possessed. But the Civil War found the country entirely unprepared for the strain that was brought upon it, and the poverty which existed in military material of all kinds necessary for the organization of armies would have brought permanent disaster, except for the fact that our enemy was as badly off as we were. The men were present, but the arms were wanting.

The impetus given by the Civil War to the manufacture of small-arms, cannon, and iron-clad ships excited the inventive

genius of the people of both sides to the highest degree. The result was the application of metallic-cased cartridges to military arms, rifled cannon throwing one-hundred-pound shot, iron-clads of the Monitor and Ironsides types, and the development of torpedoes for offensive and defensive purposes. This movement did not cease when the war ended, but has continued until the present time. Machine-guns have been developed, and they are now recognized weapons in all military services. The torpedo system has been made practical by the army and navy, and officers of both services are instructed in the use and manufacture of these engines of war. The forts built a generation back, however, have been merely kept from falling to pieces, and there is not one of them that could prevent a modern ship-of-war from passing it, and the ships of the navy are in such condition that, while at the end of the Civil War the navy was the pride of the country, to-day patriotic sailors hang their heads when it is mentioned. Efficient breech-loading small-arms have been manufactured by the ordnance corps sufficient for the supply of the army and marine corps, and for a few State volunteer troops, but no store of them has been collected, so that there is nothing on hand for the armament of the militia. A few thousand volunteer or militia troops have been organized in the States, and are well uniformed and equipped, but the number is small and they are widely scattered. The only implement of warfare in which the United States have kept abreast of modern improvement is the torpedo, and yet it is doubtful whether there is a sufficient number of torpedoes owned by the United States to-day to defend efficiently one large sea-port.

On the other hand, all other civilized nations have for the past twenty years steadily progressed in the improvement and strengthening of forts, ships, guns, small-arms, and torpedoes. Efficient guns have been made and have come into use which weigh one hundred tons and throw projectiles weighing one ton, capable of piercing iron plates from twenty to twenty-four inches thick at distances of one thousand yards. To counteract the enormous power of such guns, iron-clad forts capable of sustaining the fire of the one-hundred-ton guns have been erected, and ships-of-war have been built which are proof even against such projectiles. In fact, all civilized countries except the United States recognize the principles of the art of war, and the wisdom of the hackneyed adage, "In time of peace prepare for war."

Our efforts have been confined to keeping the old forts in ordinary repair, to building a few ships not iron-clad, and repairing old ships, to supplying the little army with breech-loading small-arms, to making an insignificant annual appropriation for the armament of the militia, and to the development of the torpedo system. It is no exaggeration to say that there is no sea-board city in the United States that could not at this time be laid under contribution by a single hostile iron-clad ship, which, after receiving the contribution, or destroying the city by bombardment, could quietly steam out to sea without danger of damage from anything which any fort or ship of the United States can do. Every year the chiefs of the engineers and ordnance of the army and the heads of bureaus of the Navy Department, sustained by their respective chiefs, and by the Presidents of the United States, have given warning of the dangers which we incur by our inaction, and have urged the necessity of placing our harbors in a decent state of defense, of constructing guns equal in efficiency to those of other civilized nations, of collecting arms for a more speedy armament of the militia, and of building ships of the modern war type.

These men have done everything that it was in the power of men to do to awaken the people to a sense of our deficiencies in national defense. The only effect has been the appointment of boards by law to investigate the subjects of ships, guns, and forts. These boards perform the duties imposed upon them with fidelity and ability, and make proper recommendations. But the effect of their appointment by law is bad, however able their members may be. The responsibility is taken from those with whom it properly rests, and a want of confidence is shown in the proper departments and their subordinates, which, in time, will do harm. The result must be a divided responsibility. The money to carry out the recommendations of these boards has never been given, unless the appropriation made by the last Congress for the construction and armament of ships be an exception. The very information to procure which the boards were formed was already in the possession of the proper departments, and all that was necessary was to appropriate the money to utilize it. In the meantime, the forts and the ships have become worthless and the guns old iron.

Hundreds of millions of dollars have been spent for objects which, to say the least, could have been postponed until an effi-

cient national defense by land and sea against all comers had been established. But virtually there has been spent not one cent for *defense*. Any one seeking for the cause of this neglect will find that all those whose duty it is to warn the people and their representatives of the danger have performed this duty in season and out of season. And subordinate officers of both services have shown by their discussions in technical societies, and by their official reports and testimony, that the army and navy are cognizant of and anxious about the dangers attending our undefended frontiers.

Nor is Congress alone in fault. Although it has power under the Constitution to "provide for the common defense" of the United States, and has not, for the period since the Civil War, exercised this power, yet had the people felt the interest in the subject which it deserves, the power would have been exercised. Congress follows public opinion, it does not form nor lead it. And in the case of the national defense, the people have not indicated that they are alive to the importance of the subject through State legislatures, the press, by public meetings, by action of commercial bodies, or by any other means. Seemingly, it is not of the slightest importance to them, and their representatives have only adopted their views. When the punishment comes, as it surely will come if the same neglect be continued, the people will not have even the poor satisfaction of laying the blame on their public servants. They must bear the blame themselves. No scape-goat will suffice.

If, therefore, the principles upon which the board of 1816 acted in devising a system of defense against foreign attack are correct, the important sea-board cities of the United States, and the harbors, should be defended by forts armed with the best modern guns, and constructed of iron or earth, or of a combination of the two materials, capable of preventing a fleet from passing them. Torpedoes should be stored in quantities sufficient to insure the destruction of a fleet attempting to enter the harbor channels, and shot-proof depots for the storage and manipulation of torpedoes and their materials in the presence of the enemy should be constructed. The navy should be kept abreast of modern improvements in ships and guns, as well as torpedoes, so that a foreign fleet should know, in undertaking a descent upon our coast, that it must fight before it can enter our waters. Material for the armament of the militia should be

collected in large quantities, so that raw levies could be armed at once. The formation of organized bodies of State troops, under their military laws, should be encouraged by every proper means; "an accurate record of all such organizations should be kept in possession of the War Department," and the organization and equipments of these troops should be made to conform, as nearly as possible, to what they should be in time of war.

Various reasons in explanation of the dilatory military policy of the United States since the end of the Civil War have been given, among others these:

First. The remoteness of the United States from any country likely to organize a hostile expedition is so great, and the failure of combinations for a distant military enterprise so probable, that we need not anticipate danger from such an undertaking. But the distance between France and Russia in 1812 was, so far as the time and means of traversing it by an army are concerned, ten times greater than is the distance between the United States and any European State. Yet this distance did not prevent the most gigantic expedition of modern times from making a successful entrance into Russia, and although the result was disastrous to the French, the expedition inflicted great injury upon Russia. In fact, the present distance between China and the United States (China being the most distant country with which the United States can ever come in conflict), viewed as to time and means of transport, is little, if at all, greater than was that between Russia and France in 1812, and this distance diminishes continually.

Second. The European powers are so jealous of each other that a war with the United States on the part of one of them would make an opportunity which would be seized by the others to wipe out old scores. So there is no danger of such a war. There is some force in this statement. But the war-making power in Europe is not in general in the possession of the people, and is held by the so-called governing classes. Should any cause of war arise between the United States and any European State, the jealousies of these governing classes would probably be small in comparison with their hatred of the United States and their free government, and the desire to embrace an opportunity to humble this country, and thus destroy its influence upon their people.

Third. The power of the United States is so great, and their trade is so important to the European powers, whose subjects, moreover, are large holders of American securities, that any of them would be loath to allow a difficulty with us to culminate in war. If wars were brought on deliberately and with wisdom on both sides, there might be force in this argument. But if deliberation, and wisdom, and justice ruled the nations in their relations with each other there would be no wars. Men and nations must be taken as they are, and history is full of instances in which sudden, foolish, and unjust wars have been carried on between nations of the highest civilization, without thought as to the respective powers of the nations engaged, and without care of the dismal consequences to both belligerents. The very fact that our relations are becoming more intimate with other nations makes the probability of quarrels with them greater. There is now scarcely a nation in Europe with which our trade in food products, or the citizenship question, might not at any time be the cause of bad blood.

Fourth. Taking the most unfavorable view of the subject, and supposing war unavoidable, the United States would have ample time to get ready, and would be prepared to drive off a foreign foe, no matter where his attack might be made. But it is not likely that negotiations leading to war would last longer than a few months. Our unprepared state would precipitate the crisis, and as years are required to build iron-clad forts and ships and modern guns, this argument needs no discussion. It is plain that it has no weight. In general, the public does not know until the danger confronts us that there is likelihood of war. In the case of the seizure of Mason and Slidell on board the English steamer *Trent* by one of our naval officers in 1862, we were somewhat prepared, because we were already in a state of war. In the difficulty with Spain in 1873, in the *Virginius* matter, and in that with Chili in 1881, concerning our diplomatic interference in the war between Chili and Peru, nothing was known by the people until the danger was imminent, and hasty measures for collecting and arming a fleet were taken in the first-named case without action of Congress. Yet in both of these cases the nations with which we were likely to be in conflict possessed ships which could have laid our sea-board cities under contribution, or could have destroyed them, and we could have done nothing to avoid the disgrace. Whether the existence of an efficient coast defense and

a powerful navy at these times would have modified our diplomacy and have produced different results cannot now be stated definitely; but valuable opportunities may have been lost through our weakness.

There is no ground for the belief that a foreign power will attempt to make a permanent lodgment in the United States. Such an effort, without the assistance of the people of the invaded part of the country, which under no circumstances would be given, would meet with speedy disaster, and no such project could be matured without ample warning to the United States. The attacks which are to be feared, and which should be provided against, would probably be of the nature of raids on a large scale, made against the exposed sea-ports, and with the least warning possible.

Fifth. It would have been an unwarrantable waste of money to attempt to keep abreast of modern improvements in the material of war, and we already have the benefit of foreign expenditure and experience without cost to us. Now it is true that we have not spent the money, but it is not true that we have the experience. Our officers, since 1865, have taken all the means at their disposal to acquaint themselves with the methods of constructing iron-clad forts and ships, and modern guns. But it is not in the nature of things that they or any other persons in the United States should know anything practically of the construction or handling of any of these things, as they are now made and handled. Several years (no man can tell the precise number) would be required before the first ship, fort, or gun could be completed, and several years more before they could be turned out in quantities sufficient to constitute an efficient defense, and our officers and men be made familiar with sailing the ships and handling the guns.

There are other arguments in favor of our past policy of a weak national defense, based upon the improbability of future wars, the increase of the feeling in favor of the settlement of disputes between nations by arbitration, etc. Those who believe that there will be no more war will not be persuaded by any argument from past experience, nor from what is going on in the world now, nor even if one were to rise from the dead. They will hold their opinions until the war is upon us. Even in 1861 there were men who believed that there would be no civil war in the United States.

It is an unpleasant task to tell unwelcome truths. The person who performs it is placed in the category of those who give unasked advice. Thousands of lives and much treasure will be saved, and national humiliation avoided, if the American people awake to their duty of properly defending their coasts, a duty the cost of the performance of which is infinitely small compared to the benefit to the United States which will inure from its proper and speedy performance, and the longer neglect of which is sure to bring punishment in this or a succeeding generation.

W. B. FRANKLIN.

RAILROAD AND PUBLIC TIME.

IN a former paper,* the part which the railroads were to play in bringing about convenient time standards in the United States was fully pointed out. There appeared recently an official expression of the opinion of the railroad managers, written by the Secretary of the General and Southern Railway Time Conventions, which so clearly indicated the desirability of introducing hourly standards, that it is now generally agreed among the railroad people that the fall and winter time-tables are to be made up according to the new standards of time.† The resolutions do not advocate any rigid division of standards of time by astronomical meridians, but very sensibly keep communities and railroads which are associated to the same standard. Thus, for instance, the first resolution implies that Portland, Boston, Providence, New London, New York, Montreal, Albany, Philadelphia, Baltimore, Toronto, Hamilton, Washington, Richmond, and Charleston, and the railroads connecting these points, are to use the "Eastern," or 75th meridian time. "Central" time, or the 105th meridian, will be used by the great system of railroads lying west of Pittsburg and Savannah and east of Toyah on the Texas Pacific, and Whitewood on the Northern Pacific. The names to be given to the various standards are, for the 60th meridian west of Greenwich, "Intercolonial"; for the 75th meridian, "Eastern"; for the 90th meridian, "Central";

* North American Review, December, 1880.

† Report on the subject of National Standard Time made to the General and Southern Railway Time Conventions, held in St. Louis, April 11, 1883, and in New York City, April 18, 1883; and directed to be forwarded, with accompanying map, to the managing officer of each railway line situated in the United States and the Dominion of Canada, together with other papers relating thereto. By W. F. Allen, Secretary of the Conventions. National Railway Publication Company Print, 46 Bond street, New York.

for the 105th meridian, "Mountain"; and for the 120th meridian, "Pacific" time. It will be seen that the only change in these names from those previously proposed is in calling Atlantic time "Eastern" time and Eastern time "Intercolonial" time. "Atlantic" corresponds with "Pacific," and there does not seem to be any very good reason for the change.

So much for the scheme of the railroad people. When it goes into operation, there will be a little dissenting by the almanac makers and a little more by the people who would like to see absolutely the same time from one end of the country to the other; but all the rest of us will change our watches and clocks, and forget the inconvenience and irritation of preceding years and only know that everybody keeps the same time that we do. The traveler from Chicago will know that his watch is an hour slow when he leaves Pittsburg coming east, and the traveler from Quebec to Charleston that he is an hour fast when he leaves St. Augustine for Winnipeg. Fortunately our Eastern time meridian passes between New York and Philadelphia, and the Central meridian passes between Chicago and St. Louis. These are very nearly population centers, and the very large majority therefore of the population of the country will have the true local time practically coincident with the public time in use. In such a State as Ohio, however, in which the local time will be half an hour fast of the public time, there will be certain days about the 1st of November in which the sun will cross the meridian about a quarter past eleven, Central time, and a quarter before twelve about February 20th. The extreme effect in November will be to shorten the business mornings, and to lengthen the business afternoons, by three-quarters of an hour, or half an hour less or more than at present. In Pittsburg and in western New York the effect will be just the opposite. In England, where the extreme difference of time between the Greenwich standard time and the local time in the extreme West is also about half an hour, the variance is not felt as a business inconvenience. In our country, with our brighter skies and our greater dependence on daylight, our banks and commercial bodies may find it expedient to alter their nominal times of doing business by half an hour, wherever the change of times is most perceptible.

With the general adoption of such uniform standard time comes the question of supply and transmission of time for public use. It might appear that the U. S. Naval Observatory

should be the chief source and center for the distribution of time in the United States. This ought not, however, to be the case, nor would it prove most profitable to the scientific interests of the country that it should be so. The private observatories, by which is meant those not supported by the General Government, have been for many years the teachers of the public on the time question. Most of them are telegraphically connected with the cities and railroads in their vicinity, and are performing the work of furnishing the time to the satisfaction and convenience of all concerned. They are living examples to the business men around them of the usefulness of astronomical science in every-day life. They earn from their time services sums of money, small to be sure, but sufficient in the aggregate to enable them to do a fair amount of purely scientific work; and in some cases observatories are kept alive by their income from this source. Time for commercial use is about the only incidental product of an astronomical observatory. It is the first thing the astronomer must have, and he must have it constantly. It is not therefore a business venture with its attendant risks for an observatory to "sell time." It is rather the utilization of a product which will otherwise be unused. There is no pretense that the Naval Observatory will do the work better than it is now done by the best private observatories, and it is to be hoped that well enough will be let alone. There are large areas of territory, particularly in the South, where there are no private observatories, which will naturally look to the Naval Observatory in the future, as they have in the past, for their standard time.

It is doubtless within the province of Congress to introduce national legislation on this subject as pertaining to interstate commerce. Until such legislation is established, either by Congress or the separate States, the question as to what is legally the time of day will occasionally be in dispute. The General Assembly of the State of Connecticut, at its January session, 1881, passed by a unanimous vote, "An Act establishing a Standard of Time." In this act the Legislature assumed the right to establish a standard time meridian, to make a contract for the obtaining of an accurate time standard, and to require the railroads of the State, as a measure of public safety in railroad traffic, to transmit and display this time. Bills with the same object in view have been introduced in the legislatures of

other States, and it can only be a short time until the time question will be a common subject of legislation. The operation of the law referred to, in Connecticut, has been watched by the Board of Railroad Commissioners, and at the close of the first and second years of its working they speak of it with commendation. They say in their report for 1881:

“The importance of accuracy and uniformity, both as a means of preventing accidents and of determining responsibility, when one occurs, needs no argument.

“In the case of one accident during the year, the evidence was conflicting, whether it occurred at a certain time or four minutes later, and upon that difference of four minutes depended the determination of the question whether a rule of the company had been violated or not. If the accident occurred at the later time the rule was violated, while a compliance with it would have prevented the accident.

“In another instance, which, like the former, was a rear collision, had this system been in use, and the time-pieces of the conductors and engineers corrected by a standard time on starting out, a half hour before the accident, in all probability it would not have occurred, but if it had, there would have been no question as to where the entire responsibility rested.

“Not only is there no absolute uniformity of time among all our roads, but there is no attempt at it, except among those named, and approximately on some connecting lines. East of the Connecticut River there are three standards, and two west of the river . . .

“Did the advantages and profit of this uniformity accrue solely, or even chiefly, to the railroad companies, then the expense of determining and distributing the standard time would properly be charged to them, but its advantages extend to all classes, and the distribution of the cost should be co-extensive.”

The merchants, manufacturers, and railroad people unite in their favorable opinion of the law, and the consequent cessation of vexatious time differences in the State. The time is furnished, transmitted, and displayed throughout the State with precision and regularity, and no opinion has yet been expressed that the State is otherwise than a gainer by its contracts for furnishing the time. The experiment is referred to here as affording an example of what may be done elsewhere to the mutual advantage of the States and observatories within their borders.

Connected with the time question for a single country like ours is that of international time, to which the new name has been given of Cosmopolitan time. President Barnard has ex-

plained * and supported this system, and an International Commission has been proposed to consider it. In this system the prime meridian is one hundred and eighty degrees, or twelve hours, from Greenwich, passes near Behring Strait, and lies almost wholly in the ocean. The day begins at midnight, and the hours are counted up to twenty-four. At intervals of an hour from the prime meridian occur the secondary meridians. These meridians are designated by the consecutive letters of the alphabet omitting J and V. The minutes and seconds would be the same the world over in Cosmopolitan time, and the local time at any place would be found by subtracting the number of hours corresponding to the standard meridian from which the local time is reckoned, local time signifying the time of the nearest hourly standard meridian. This is very convenient for navigators, since the "change of count" takes place near the prime meridian, and events recorded in Cosmopolitan time are comparable, without considering differences in longitude.

The necessity of uniformity in time is so generally recognized that projects for its display are already enlisting capital in a new branch of industry. In Paris, Berlin, Vienna, London, and more recently in New Haven and New York, stock companies have been formed for the purpose of regularly selling time to whoever wants to buy. These companies, which are financially quite successful abroad, where the results of the experiment have already accumulated, receive the time from the astronomical observatories, and by means of systems of pneumatic tubes, or telegraph lines, or both combined, they transmit the time to clock-dial indicators in the houses or places of business of their subscribers. Instead of buying a clock, the coming householder pays a new tax in addition to that for gas and water, and new monopolies for furnishing time to streets and city houses will in the not distant future plague the city fathers.

* Preamble and resolution submitted to the Association for the Reform and Codification of the Law of Nations, at their meeting in August, 1881, at Cologne, in Rhine-Prussia, by President F. A. P. Barnard, of Columbia College.

LEONARD WALDO.

MORALITY AND RELIGION.

MR. KIDDER.

THE man who does not accept the doctrines laid down by the authorities of the Christian Church is set down as an "unbeliever," and the Church has heretofore so dominated the sentiment of society as to make it a term of reproach. It is ceasing to be so. The most intelligent, the most cultivated, and the most conscientious members of the community are coming more and more to reject the doctrines still deemed essential in the Church, while their character for virtue and respectability has to be recognized. Doubt very naturally arises as to whether religious belief has any necessary connection with moral conduct, whether, in fact, the so-called believer is any better than the so-called unbeliever.

In the first place, the difference between them is not that one believes and the other does not believe, but that they do not believe alike, and that their belief has not the same foundation. We dispute the right of the Church believer any longer to cast reproach on the believer outside of the Church, or to thank God that he is either better or safer than other men. But what do "unbelievers" believe? They believe as much in virtue and good morals as Christians of the "straitest sect." They believe in uprightness—righteousness, if you please—as best for mankind in this life and in any life to which they may be destined, and they believe in promoting virtue and uprightness by every means. But they believe that what is called the Old Testament Scriptures is simply a mass of Hebrew literature, subject to the same canons of criticism that apply to any other collection of books. They believe that the judgment which selected these particular books and called them sacred was a fallible human judgment. They believe the Pentateuch to contain a purely mythical account of the creation of the world and the origin of

the human race. They believe that the account of the origin and history of the Jewish people is mixed up with legend, much of it incredible. They believe the Mosaic law in all its details to be a human production, applicable to a particular people in a rude age, though it contains some moral precepts universally accepted. They believe the early Jewish idea of the Deity to be a monstrous combination of the attributes of the heathen gods and the Oriental despots of the time, exalted by the genius of Moses, and varied from time to time by the priests and prophets of the Jewish people. They believe that the annals of the Hebrews contain a good deal of rubbish and some absolutely disgusting incidents, and that the whole mass is to be treated like any other literature of an ancient people. The prophets and psalmists, like the philosophers and singers of other nations, produced many things worthy of preservation and admiration, but nothing that should be exempt from a discriminating criticism. The people for whom the present writer speaks have their belief about the Old Testament, as clear and positive as that of the Church.

So have they of the New Testament. They regard that as a peculiarly interesting collection of literature, pertaining to the life and teachings of a singularly pure and enthusiastic preacher who sacrificed his life to the intolerant spirit of the established theology of his time and who has exercised a wonderful influence over human history. They admire his character and his teachings, but believe that both have been amazingly distorted. The record written up from tradition long after his death is, of course, imperfect. Superstition and credulity added much that would be rejected in any other old record and should be in this. "Unbelievers" believe the gospels to be a crude and imperfect record, containing many errors of fact and much coloring of belief derived from writers who were not cognizant of the facts. They regard Paul and the apostles as the real founders of Christianity as a system, but they believe that Christianity as it now exists has been a growth, like every other system, whether of religion, politics, or philosophy,—the work of man in the same sense in which government and the theories and methods of public administration are the work of man.

Those whom the Church calls unbelievers found their belief on the study of nature and of man. It is made up of the best conclusions of human experience, human knowledge, and

human study up to this point in the world's development. Those conclusions contradict most of the belief based on what is called revelation; consequently they cannot accept that revelation as Divine or authoritative. Do they believe in a God, in immortality, and in a future state of man? That depends on the definition of these terms and on the mental constitution of the believer. Few pretend to have any positive answer to make to unanswerable questions. They go as far in their conclusions as human knowledge and human reasoning can carry them, and there they stop. They have no right to assume, save each for himself. They do not, like the Church, claim a peculiar conclusiveness or a peculiar sacredness for their assumptions, or try to impose them on others.

It makes no difference what men believe upon the doctrinal points of religion; they are no better or worse for believing or not believing. In other words, there is no connection between morality and dogmatic belief. A man may reject the doctrines of the Church entirely and be just as virtuous, just as upright, just as good, and just as safe for all the chances of eternity as the most devout believer in them. The moral teachings of Christianity do not differ, in the main, from the moral teachings of philosophy. Unbelievers accept them, not as the result of revelation or the offspring of religion, but as the best deductions of human experience and thought. They are apart entirely from matters of doctrinal belief or religious worship, and just as good coming from Zoroaster as from Solomon, from Buddha as from Jesus, from Socrates as from Paul, from Shakespeare as from Augustine. The question does not directly concern what the Church has done or is doing as an organization for the good of humanity. If our position is sound, it could do just as much without its dogmas, and its power to do it is not dependent on its system of doctrinal belief; or the same good could be done by a human organization otherwise founded. Moreover, the unbeliever in Christian doctrines, as we have defined his position, must not be confounded with the class which does not think at all and which has no belief of any kind. This class, being ignorant and unintelligent, is apt to be vicious, but it is not usually graced with the epithet of infidel. It is subject to superstition and given to credulity; it is moved by appeals to the hopes and fears, and it may be that the Church in the peculiar character of its teachings still serves a useful purpose in improving the lives and conduct of the lower ranks of

humanity. Perhaps the philosophy of the unbeliever could not or would not directly reach and elevate them, though it may be claimed that methods which elevate the race as a whole bring up the very lowest layers and let light into the darkest places. The results of scientific study and of progressive thought enlighten the every-day common sense of the people, and it is not merely the student and thinker who refuses to be a believer, in the sense imposed upon the word by the Church. The mass of the people are coming more and more to reject the old dogmas, and less and less to need them.

Systems of theology in the past have been the product of human need in the lower stages of mental and moral development, and they have served their purpose in the progress of civilization. To-day, theology is in the rear of thought and not in the van. It holds to worn-out dogmas, potent in times of ignorance and superstition, impotent in the light of science and philosophy. The latter are destroying religious belief as it has been held in the past, and the result is not a lower standard of moral conduct. To the man who reasons clearly the promises and threats of religion are futile, and it is through promises and threats that it has done its work. Such a man can govern his own conduct and try to improve others without these. We have reached the stage where society generally can do without them; they are losing their effect, and agencies of moral support and improvement can be made quite as effective without any regard to the doctrines that are now held by the Church as essential to salvation. The belief of the "unbeliever" is as good for the moral well-being of man as the belief of the Christian.

Nor do we ignore the needs of what is called the spiritual nature of man, or, more accurately speaking, his emotional nature. But we contend that the highest intellectual view of the life and destiny of mankind, a view based on knowledge and reason and requiring no other revelation, gives room for the loftiest development, the fullest exercise, and the amplest sustenance and support for that part of man's nature usually denominated spiritual. To admit that it requires a belief which intelligence and reason do not accept would be equivalent to holding that delusion is necessary to the comfort and consolation of the human soul.

What we contend for is simply this: The position of unbelief in the distinctive dogmas of the Christian Church to-day is the result of scientific investigation and critical study, and is gener-

ally accepted, not only by students and thinkers, but by the intelligent common sense of the mass of mankind. It is strengthened by every advance in discovery and in that philosophy which is the outcome of human knowledge. The prevailing type of Christianity, on the other hand, clings to superstition and credulity as the basis of its influence. It will not, so far as it can help it, permit common sense to assert itself in the place of unreasoning faith in the dreams of the olden time. The consequence is that the Church is losing its hold on the convictions of men and on the conscience of the community. The belief that is founded on scientific conclusions and common sense affords as solid a basis for moral character and as firm a support for virtue as belief in the religious doctrines of the past or present. It is not denied that the Church, as an organization, has done and is doing good to humanity, nor is it claimed that it makes no difference what a man believes, or whether he believe anything, in matters of ethics. But it is claimed that if the Church abandoned its outworn creeds, and gave up old superstitions about Divine revelation, vicarious atonement, salvation by faith, and future retribution, it could do far more good by reaching and elevating a larger number of people. It is certain that if it does not keep up with the mental progress of the race, it will fall behind in moral progress, and will lose its influence upon the intelligent and thinking part of mankind.

F. A. KIDDER.

PROF. HODGE.

It is quite possible that, during the long history of theological disputation, some orthodox dogmatist may have equaled, in disconnected utterance of unproved assertions the agnostic text furnished us, in the stead of a subject, as a basis for this discussion; but it is impossible that any one of them could in this regard have surpassed it. From the eddy of remark we disentangle three unsupported assertions, each of which could be adequately met by a simple denial.

First. It is asserted that the designation of those who reject as untrue the common faith of Christendom, by the term "infidel," is unjust, and that "the difference between them (Christians and non-Christians) is not that one believes and the other does not believe, but that they do not believe alike." Now, this has

always been understood equally by both parties in the use of the word. We maintain that when the epithet "infidel" is applied, as is universally intended, to one who holds the characteristic truths of either or both natural or revealed religion to be incredible, it expresses with scientific accuracy the facts of the case and nothing more nor less. These persons are "infidels" in relation to those objects of faith understood definitely on each occasion of its application. The radical significance, the infinite importance, the practical consequence of the truths rejected; the millennial continuity, the catholic consensus, the venerable dignity of the Church; the substantial agreement of the vast majority of the European peoples,—require that dissent from *this* faith should be emphasized as *the* "infidelity." As believers, we wish to be known only precisely for what we are. Why should skeptics desire to apply to themselves the designations which centuries of association have inseparably bound to the faith they despise? If the term "infidel" carries with it unpleasant suggestions, arising from historical associations, which party is to blame for the fact?

Second. It is contended that the result of scientific progress and of critical investigation has been to render incredible the distinctive doctrines of the Christian Church, and that this is recognized not only by the highly cultured, but also "by the intelligent common sense of the mass of mankind." This involves the claim (1) that men of high culture, as such, see the impossibility of the truth of Christianity, and (2) that the power of Christianity as a living system of faith is visibly declining among the mass of civilized mankind; and the scope of the contest involves the claim that this disillusionizing effect of modern enlightenment extends to the whole field of natural as well as of revealed religion. No evidence of either of these assertions is suggested, and each alike is preposterously untrue. As to the former it is answered that, of course, a skeptic may also be a man of science; but to claim that culture renders Christian faith impossible is merely to beg the question, by making skepticism a part of the definition of culture. It is absurd to claim that the highest culture in this age renders faith impossible, when Gladstone and Bismarck are orthodox Christians; when Agassiz, Herschel, Sir William Thomson and Owen are at least thorough theists; when Cuvier, Henry, Tait, Balfour Stewart, Clerk Maxwell, Asa Gray, Guyot, Mivart, Charles Young, W.

Kitchen Parker (the most advanced of English evolutionists) are but specimens of a great multitude of earnest Christian professors who maintain their position at the forefront of scientific progress. Multitudes of the highest scientific authorities assert that the proved results of science present no obstacle to faith. The protest against it comes with no force higher than that derived from the vagrant speculations of a transient philosophy. And this is ventured against Christianity, which for two milleniums has retained her serene throne, while a countless succession of such philosophic tides have ebbcd and flowed around her feet.

The Church, of all interests, has least need to fear the effect of culture. Plato, Aristotle, Bacon, Descartes, Leibnitz, Kant have all in succession brought their tribute to her temples. Our ground of complaint is that our opponents are only half-educated specialists. They study the physical sciences and not the humanities; they use the senses and not the intuitions; they prophesy the future, but do not critically study the past; they read the attacks upon Christianity, but not their refutations. We claim that the great conquests of science have been confirming the truth of God's existence and manifesting the glory of His attributes beyond our fondest dreams. We claim that the results of historical and literary criticism have laid bare the foundations of our faith, and in doing so have confirmed their strength and exhibited their credentials in an exact scientific form. Those who take in the whole field of Biblical criticism, not merely one side of it, know that the drift is now decidedly against the post-exilic origin of the Pentateuch, and in favor of the Apostolic origin of the New Testament. Luthardt, Dillmann, Keil, Delitzsch, Lightfoot, Westcott, Weiss, Ezra Abbott, and others show the claims of victory set up by the opponents of our faith to be very premature. Zoekler, in a review of the Old Testament literature of 1882, in the January (1883) number of "*Luthardt's Zeitschrift*," says: "The works of last year controverting the views of Wellhausen and his school preponderate very decidedly, both in number and in scientific merit, over the works on the opposite side." See also the encyclopædic résumé of the History of Biblical Criticism, in the "*Presbyterian Review*," January 1, 1883.

As to the second point asserted, viz., that the power of Christianity as a living system of faith is visibly declining among the

mass of civilized mankind, the refutation is no less easily produced, and no less overwhelming. These announcements of the decay and approaching dissolution of Christianity have been repeated, only to be brought to shame over and over again, for the past fifteen hundred years, but never before with so little to excuse and so much to rebut them. In A. D. 304, at the end of the Diocletian persecutions, and only twenty years before Christianity conquered for itself imperial establishment, the Augusti were hailed with new honorary addresses, containing the incidental clauses, "*et nomine Christianorum deleto*," "*superstitione Christiana ubique deleta*." Hume, in Scotland, and Voltaire, in France, pronounced in effect equivalent judgments just before the opening of the splendid era of modern revivals of missions and of literary and theological activity, when the Church, supposed to be moribund, has exhibited both intensively and extensively more of the creative energy of the Apostolic age than it had done in any of the centuries that intervene.

We admit, of course, that the external activities of a given community are not wholly commensurate with the contemporaneous mental states and tendencies of its members. The habits of men often remain in action after the faiths of which they are the expression have begun to die at the root, even as the waves of the ocean are often high after the winds which raised them have subsided. We also admit that statistics, like all other systems of facts or of symbols, may be so used as to express untruths. But it is absurd to pretend that a rising wave over an entire ocean can be diagnostic of a falling wind, and statistics, when the induction is broad enough, are among the most solid of all scientific data. Never before has Christianity, nominal and real, advanced as during the present century. The best approximate estimates give as the whole number of nominal Christians on earth at the end of the first century, 500,000; at the end of the seventh century, 25,000,000; at the end of the fourteenth century, 80,000,000; at the end of the seventeenth century, 155,000,000; at the end of the eighteenth century, 200,000,000; and in 1880, 410,000,000. As to the relative political influence of these Christians, we have 100,000,000 of population subject to Christian government in A. D. 1500 as compared with 685,459,000 in A. D. 1876.

As to the religious tendencies prevailing at present in the population of this country, the following statistics, gathered

with great care from the year-books of all the evangelical churches, will be seen to be conclusive. In the year 1800, there were in the evangelical churches in the United States 3030 congregations, 2651 ordained ministers, and 364,872 communicants. In the year 1850, there were 43,072 churches, 25,555 ministers, and 3,529,988 communicants. In the year 1870, 70,148 churches, 47,609 ministers, and 6,673,396 communicants. In 1880, 97,090 churches, 69,870 ministers, and 10,065,963 communicants. The ratio of the communicants of our evangelical churches to the entire population of the United States at these different dates was, in 1800, one to every 14.50 inhabitants; in 1850, one to every 6.57 inhabitants; in 1870, one to every 5.78; and in 1880, one to every 5 inhabitants. This last, of course, is one communicant to every 2.5 or 3 non-Roman Catholic adult men and women. From 1800 to 1880 the population of the nation increased 9.46-fold; while, in the same time, the evangelical communicants increased 27.52-fold. From 1850 to 1880 the population increased 116 per cent., and the evangelical communicants increased 184 per cent.

The above leaves out of view the 6,367,330 Roman Catholics, who do not report communicants as distinct from the general mass of their adherents. If these are all counted as sincere believers in the truths of historical Christianity, it increases the superior ratio of the increase of those who make a personal acknowledgment of the truth of Christianity over that of the general population 100 per cent. The Catholic population has increased more than four hundred per cent. in the last thirty years.

On the other hand, the liberal churches, which have in some degree followed the advice to put less stress upon the distinguishing doctrines of a pretended supernatural revelation, have been relatively retrograding. The number of parishes claimed by the Unitarians in 1850 was 246, and they had only 335 in 1880, or an increase of 35 per cent. in thirty years as compared with the 250 per cent. increase made by the evangelical churches in the same time. The Universalist churches in 1850 were 1069 and only 956 in 1880, an actual loss of 113 in thirty years. The Christian Church (Unitarian Baptist) has also retrograded from 1500 parishes in 1840 to 1200 in 1880.

That these statistics represent a real faith is shown by the evidence our year-books present of the amazing missionary fruit-

fulness of these professing Christians. The work of foreign missions is a characteristic enterprise of the present century. Professor Christlieb has estimated that in 1800 the total sum annually contributed in all Christendom to Protestant missions amounted to \$250,000. In 1850 the income of the mission boards in England and America was \$2,959,541. In 1872 the amount was \$7,874,155. The reports from all the missions cannot be obtained, so that, from the nature of the case, our carefully collected reports fall below and can never equal the real facts of the case. Protestant mission societies in Europe and America reported in A. D. 1830 : missions 122, ordained missionaries 656, lay helpers 1236, communicants 70,289, scholars 80,656. In A. D. 1850 : missions 178, ordained missionaries 1672, lay helpers 4056, communicants 210,957, scholars 147,939. In A. D. 1880 : missions 504, ordained missionaries 6696, lay helpers 33,852, communicants 857,332 (148 missions not reporting), scholars 447,602, with hearers and adherents, estimated from the actual reports of the missions, amounting to 2,000,000.

In the meantime, the aggregate funds collected by the evangelical churches in the United States for home missions amounted, from A. D. 1820 to A. D. 1829, to \$233,826 ; from A. D. 1860 to A. D. 1869 they amounted to \$21,015,719, and from A. D. 1870 to 1880 they amounted to \$31,272,154. Sunday-schools were instituted only one hundred years ago. Fifty years afterward, in A. D. 1830, it is estimated that there were less than 2,000,000 teachers and scholars in the world. In A. D. 1880 there were 14,000,000 teachers and scholars in the world, or 6,000,000 in Europe and 8,000,000 in America.

Young Men's Christian Associations date back only about thirty years and, more than any other religious movement, prove the intense vitality of Christian life in the bosoms of intelligent laymen of the present and coming generation. The "International Convention of Young Men's Christian Associations," held at Milwaukee, Wis., May 16-20, 1883, report in their year-book a total of 2428 associations for the whole world, including 840 for North America ; 388 for Great Britain and Ireland ; 64 for France ; 400 for Germany ; 335 for Holland, etc. These labor for the religious welfare of young men, providing for them libraries, lectures, prayer-meetings, Bible classes, and introducing strangers to the churches. Separate departments work in the special fields of "City and Town Associations," "Railroad

Branches and Associations," and "College Associations," and the reports of the latter are especially significant in this inquiry. They enumerate 170 Young Men's Christian Associations in as many colleges in the United States. These embrace 9250 members, out of 33,000 students in these colleges, and these are the working, as distinct from the professing, Christians. One thousand five hundred students in these colleges professed conversion during the past year. Dr. Ashbel Green said, in A. D. 1813, that there were only two or three students in Princeton College who professed to be religious men. When Dr. Dwight became president of Yale College, in A. D. 1795, only four or five students were members of the church. The reports of 1883 give: in Princeton, 270 professing Christians, who include the great majority of the higher scholars, out of a total of 578 students; and in Yale, 290, out of a total of 611; in Williams, 147, out of 248; and in Amherst, 233, out of 352. In many other colleges the proportions are still more favorable to the prospects of Christianity. It certainly appears as if our "cultured" friends gave too much credit to "the intelligent common sense of the mass of mankind."

Third. The third point asserted without proof is, that morality is entirely independent of religious opinion, and will survive without impairment when all positive opinion on religious questions is abandoned. It is obvious that such a question cannot be debated in the limits afforded for this discussion. It will be sufficient if the following points are noted in rebuttal of the absolutely unsupported assertion of our respondent:

(1.) The contention, as determined by our respondent himself, relates to the independence of morals (not only its idea, but its practical realization in the mass of a civilized community) of all the postulates of natural as well as of revealed religion.

(2.) We on our side, instead of denying, affirm that man is essentially a moral being. That "the law written on his heart" and "the light of nature" render him a moral agent, capable of doing right in many relations and responsible in all known relations, irrespective of any supernatural revelation whatsoever.

(3.) The burden of proof rests upon our respondents, and they labor against the presumption created by the whole unqualified mass of human experience in the past. Morality, as predicable of any community of mankind, never has been separated from religious dogmas and practices. The Buddhists of Siam, Burmah, and China have a low form of religion to which

the morality of those communities corresponds. The princes of heathen morals, Seneca, Epictetus, Marcus Aurelius, Plutarch (A. D. 50-125), all based their morality upon their theology. The latter states the sum of human experience, ancient and modern, when he says: "There has never been a state of atheists. You may travel over the world, and you may find cities without walls, without king, without mint, without theater or gymnasium, but you will never find a city without God, without prayer, without oracle, without sacrifice. Sooner may a city stand without foundations than a state without belief in the gods. This is the bond of all society, the pillar of all legislation." We do not deny the existence, in this day, of exceptionably lovely characters who are skeptical—often most sadly so—as to all religious truth, natural and revealed. We deny, however, that these prove that morality is independent of religion. Morality in them, as in all others, has its root in theology, and their cases are easily explainable on the scientific principles of heredity, education, and environment. The examples of prominent emancipated moralists, male and female,—as John Stuart Mill and George Eliot, etc.,—do not re-assure us. The experiments made by communities of atheists in the Reign of Terror and in the Commune in Paris, and the proclaimed principles of the "International Society" of Communists, who declare at once the abolition of God, of marriage, and of property, do not re-assure us. The "cultured" must give us proof, not assertion, for their contention that morality is independent of religion.

(4.) Morality is, as to its essence, authoritative. It is the categorical imperative. It is ultimate, incapable of analysis. There has been no success in the attempt to confound it with utility, nor in the more recent and more pretentious attempts to trace its genesis out of associated sensations or animal impulses. It is sovereign over all these and dominates them from above. It necessarily presupposes personality, moral intuitions, and rational and responsible spontaneity. It has existed, as an ultimate fact, just as we find it, throughout all stages of human history. Hence, it is as spiritual and transcendental as religion itself. The same paralysis of faith which tends to render ineffectual the abundant evidences of religion, natural and revealed, would necessarily tend equally to render obscure and ineffectual genuine moral distinctions and obligations.

(5.) Even natural religion, much more the facts and doctrines of the Christian revelation, beyond all controversy

reënforce the moral element in human nature. They supply the sublime authority of an infinite, eternal, absolutely perfect moral governor; the clear revelation of his will in all relations and under all conditions; the tremendous sanctions of future rewards and punishment; the effective exhibition of our Heavenly Father's absolute righteousness and infinite love; the utterly unparalleled ideal of wisdom and moral perfection in human form exhibited in Jesus Christ; the all-penetrating, all-informing inspiration of the Holy Ghost; the cloud of witnesses; the fellowship of the saints; and the ordinances of the holy Sabbath and of the Christian Church.

If revelation is false, its influence cannot be morally good. But if true, it evidently renders the most sufficient support to morality. If it be withdrawn, we have every reason to apprehend the most serious loss to the moral character and habits of the following generations. If untrue, religion must be immoral; hence, if its influence is moral, it follows that it must be true. This fact, so obvious and vital, is a strong corroborating evidence of the truth of Christianity, and the burden of proof lies wholly on the other side.

(6.) Science, devoid of theism, is universally pessimistic. The worlds all tend to darkness and death. The struggle for life and the survival of the physically fittest often involves the survival of the morally monstrous. Nature is proved to be, as over against all human interests and agencies, fatalistic, mechanical, unsympathetic to all agony, impassive to all struggle, and deaf to all prayer. Take away all theistic intention, and there is no basis for hope. Take away hope, and there is no basis for morals.

(7.) Given theism, Christianity follows. Theistic science leads to Christianity.

(8.) Even if morality could survive religion, our destructive critics will have to prove that morality alone will be sufficient for human needs. What if man be a sinner, as the human conscience has testified in infinite variety of forms, but with absolute identity of sense through all history? What if man needs expiation and a moral change of essential character? This we continue to believe. This is what our respondents have yet to disprove.

A. A. HODGE.

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THE
NORTH AMERICAN
REVIEW.

EDITED BY ALLEN THORNDIKE RICE.

July, 1883.

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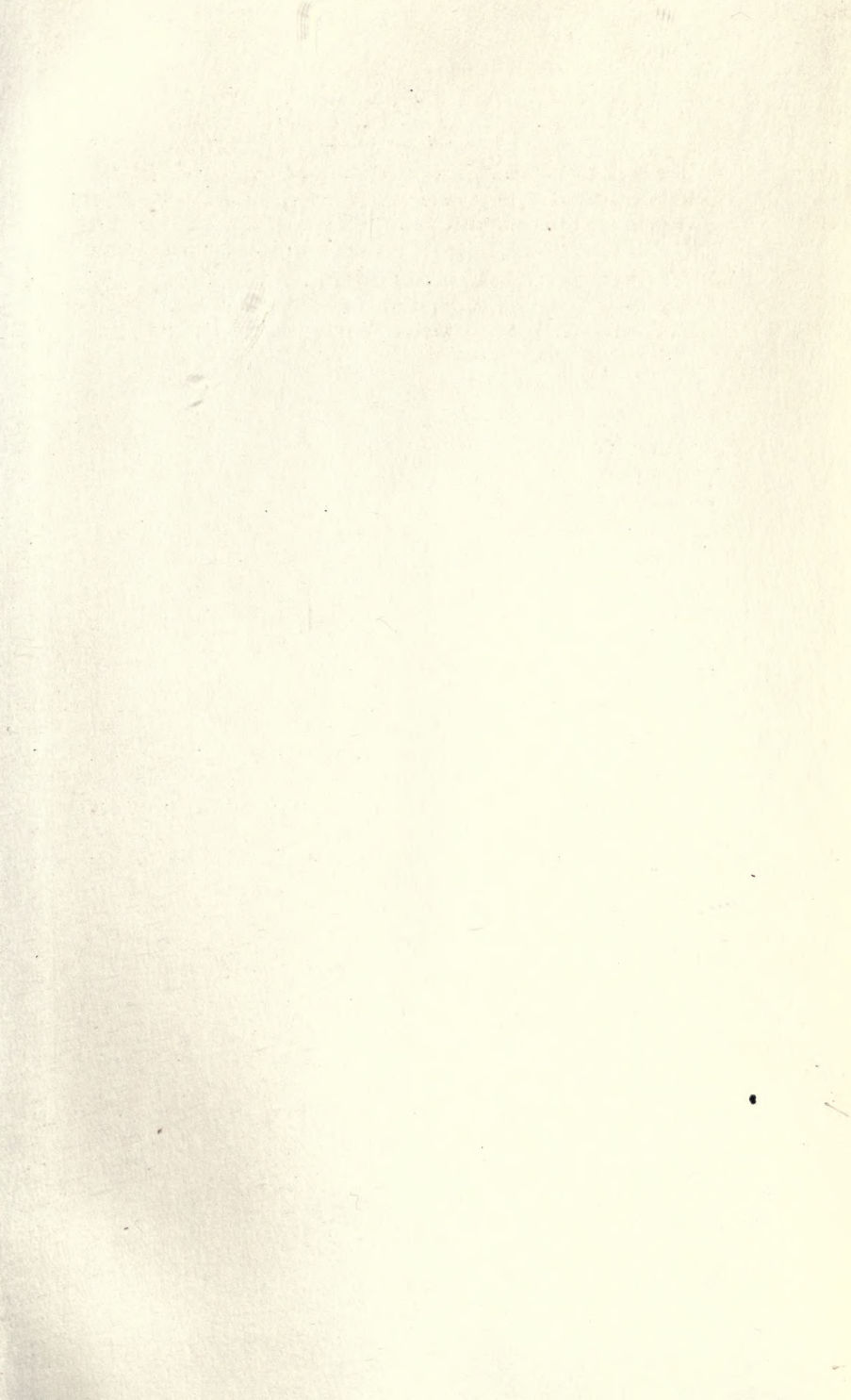
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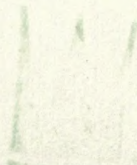
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